Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Ballfields Parcels at DoDHF Novato, CA

Collection Date: April 5 through April 6, 2005

LDC Report Date: June 16, 2005

Matrix: Soil

Parameters: Semivolatiles

Validation Level: NFESC Level III & IV

Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K2502505

Sample Identification

TO63-R3-SB04-0-0.5
TO63-R3-SB04-2-3**
TO63-R3-SB01-0-0.5
TO63-R3-SB01-4-5
TO63-R3-SB02-0-0.5
TO63-R3-SB03-0-0.5**
TO63-R4-SB03-0-0.5
TO63-R4-SB03-3-4
TO63-R4-SB02-0-0.5
TO63-R4-SB01-0-0.5**
TO63-SPN-SB03-4-5
TO63-SPN-SB01-0-0.5
TO63-SPN-SB01-0-0.5 Dup
TO63-SPN-SB01-3-4**
TO63-RSP-SB02-0-0.5
TO63-RSP-SB02-5-6**
TO63-RSP-SB03-0-0.5
TO63-RSP-SB03-5-6
TO63-R4-SB03-0-0.5MS
TO63-R4-SB03-0-0.5MSD

**Indicates sample underwent NFESC Level IV review

Introduction

This data review covers 20 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C for Semivolatiles.

The review follows the Final Sampling and Analysis Plan for Preliminary Assessment/Site Investigation of Ballfields Parcels at DoDHF Novato, California, (March 23, 2005) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the methods stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blanks are summarized in Section III.

Field duplicates are summarized in Section XIII.

Samples indicated by a double asterisk on the front cover underwent NFESC Level IV review. NFESC Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by NFESC Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs) with the following exceptions:

Date	Compound	%RSD	Associated Samples	Flag	A or P
5/2/05	4,6-Dinitro-2-methylphenol	23.6	TO63-R3-SB04-0-0.5 TO63-R3-SB01-0-0.5 TO63-R3-SB01-4-5 TO63-R3-SB02-0-0.5 TO63-R3-SB03-0-0.5** TO63-R4-SB03-0-0.5 TO63-R4-SB03-3-4 TO63-R4-SB02-0-0.5 TO63-R4-SB01-0-0.5** TO63-SPN-SB03-4-5 TO63-SPN-SB01-0-0.5 TO63-SPN-SB01-0-0.5 Dup TO63-SPN-SB01-3-4** TO63-RSP-SB02-0-0.5 TO63-RSP-SB02-5-6** TO63-RSP-SB03-0-0.5 TO63-RSP-SB03-5-6 TO63-R4-SB03-0-0.5MS TO63-R4-SB03-0-0.5MSD KWG0505825-5	J (all detects) UJ (all non-detects)	A
5/5/05	2,4-Dinitrophenol	26.6	TO63-R3-SB04-2-3**	J (all detects) UJ (all non-detects)	A

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all semivolatile target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
5/3/05	Hexachlorocyclopentadiene 4,6-Dinitro-2-methylphenol 2-Nitroaniline	24 26 30	TO63-R4-SB03-0-0.5 TO63-R4-SB03-0-0.5MS TO63-R4-SB03-0-0.5MSD KWG0505825-5	J (all detects) UJ (all non-detects)	A
5/4/05	Hexachlorocyclopentadiene 2,4-Dinitrophenol	22 27	TO63-R3-SB04-0-0.5	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A
5/10/05	N-Nitroso-di-n-propylamine	23	TO63-R3-SB01-0-0.5	J (all detects) UJ (all non-detects)	A

The percent difference (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
5/2/05	3,3'-Dichlorobenzidine	29	TO63-R3-SB04-0-0.5 TO63-R3-SB01-0-0.5 TO63-R3-SB01-4-5 TO63-R3-SB02-0-0.5 TO63-R3-SB03-0-0.5** TO63-R4-SB03-0-0.5 TO63-R4-SB03-3-4 TO63-R4-SB02-0-0.5 TO63-R4-SB01-0-0.5** TO63-SPN-SB03-4-5 TO63-SPN-SB01-0-0.5 TO63-SPN-SB01-0-0.5 Dup TO63-SPN-SB01-3-4** TO63-RSP-SB02-0-0.5 TO63-RSP-SB02-5-6** TO63-RSP-SB03-0-0.5 TO63-RSP-SB03-5-6 TO63-R4-SB03-0-0.5MS TO63-R4-SB03-0-0.5MSD KWG0505825-5	J (all detects) UJ (all non-detects)	A

Date	Compound	%D	Associated Samples	Flag	A or P
5/5/05	3,3'-Dichlorobenzidine	27	TO63-R3-SB04-2-3**	J (all detects) UJ (all non-detects)	A

All of the continuing calibration RRF values for all system performance check compounds (SPCCs) were within method criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
KWG0505625-5	4/13/05	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	5.6 ug/L 8.6 ug/L	All samples in SDG K2502505

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
TO63-R3-SD04-0-0.5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	8.6 ug/Kg 62 ug/Kg	10U ug/Kg 200U ug/Kg
TO63-R3-SB04-2-3**	Bis(2-ethylhexyl)phthalate	20 ug/Kg	200U ug/Kg
TO63-R3-SB01-0-0.5	Di-n-butylphthalate	15 ug/Kg	15U ug/Kg
TO63-R3-SB01-4-5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	9.1 ug/Kg 51 ug/Kg	10U ug/Kg 200U ug/Kg
TO63-R3-SB02-0-0.5	Di-n-butylphthalate	22 ug/Kg	22U ug/Kg
TO63-R3-SB03-0-0.5**	Di-n-butylphthalate	15 ug/Kg	15U ug/Kg
TO63-R4-SB03-0-0.5 (5x)	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	31 ug/Kg 58 ug/Kg	50U ug/Kg 1000U ug/Kg
TO63-R4-SB03-3-4	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	13 ug/Kg 23 ug/Kg	13U ug/Kg 200U ug/Kg

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
TO63-R4-SB02-0-0.5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	27 ug/Kg 69 ug/Kg	27U ug/Kg 200U ug/Kg
TO63-R4-SB01-0-0.5**	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	17 ug/Kg 18 ug/Kg	17U ug/Kg 200U ug/Kg
TO63-SPN-SB03-4-5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	35 ug/Kg 17 ug/Kg	35U ug/Kg 200U ug/Kg
TO63-SPN-SB01-0-0.5 (5x)	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	24 ug/Kg 26 ug/Kg	50U ug/Kg 1000U ug/Kg
TO63-SPN-SB01-0-0.5 Dup (5x)	Bis(2-ethylhexyl)phthalate	27 ug/Kg	990U ug/Kg
TO63-SPN-SB01-3-4**	Di-n-butylphthalate	29 ug/Kg	29U ug/Kg
TO63-RSP-SB02-0-0.5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	41 ug/Kg 31 ug/Kg	41U ug/Kg 200U ug/Kg
TO63-RSP-SB02-5-6**	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	36 ug/Kg 36 ug/Kg	36U ug/Kg 200U ug/Kg
TO63-RSP-SB03-0-0.5	Di-n-butylphthalate	35 ug/Kg	35U ug/Kg
TO63-RSP-SB03-5-6	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	28 ug/Kg 80 ug/Kg	28U ug/Kg 200U ug/Kg

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which NFESC Level IV review was performed. Raw data were not evaluated for the samples reviewed by NFESC Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which NFESC Level IV review was performed. Raw data were not evaluated for the samples reviewed by NFESC Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was within validation criteria for samples on which NFESC Level IV review was performed. Raw data were not evaluated for the samples reviewed by NFESC Level III criteria.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples TO63-SPN-SB01-0-0.5 and TO63-SPN-SB01-0-0.5 Dup were identified as field duplicates. No semivolatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/L)		RPD
	TO63-SPN-SB01-0-0.5	TO63-SPN-SB01-0-0.5 Dup	
Di-n-butylphthalate	24	50U	200
Bis(2-ethylhexyl)phthalate	26	27	4

XVII. Field Blanks

No field blanks were identified in this SDG.

Ballfields Parcels at DoDHF Novato, CA
Semivolatiles - Data Qualification Summary - SDG K2502505

SDG	Sample	Compound	Flag	A or P	Reason
K2502505	TO63-R3-SB04-0-0.5 TO63-R3-SB01-0-0.5 TO63-R3-SB01-4-5 TO63-R3-SB02-0-0.5 TO63-R3-SB03-0-0.5** TO63-R4-SB03-0-0.5 TO63-R4-SB03-3-4 TO63-R4-SB02-0-0.5 TO63-R4-SB01-0-0.5** TO63-SPN-SB03-4-5 TO63-SPN-SB01-0-0.5 TO63-SPN-SB01-0-0.5 Dup TO63-SPN-SB01-3-4** TO63-RSP-SB02-0-0.5 TO63-RSP-SB02-5-6** TO63-RSP-SB03-0-0.5 TO63-RSP-SB03-5-6	4,6-Dinitro-2-methylphenol	J (all detects) UJ (all non-detects)	A	Initial calibration (%RSD)
K2502505	TO63-R3-SB04-2-3**	2,4-Dinitrophenol	J (all detects) UJ (all non-detects)	A	Initial calibration (%RSD)
K2502505	TO63-R4-SB03-0-0.5	Hexachlorocyclopentadiene 4,6-Dinitro-2-methylphenol 2-Nitroaniline	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
K2502505	TO63-R3-SB04-0-0.5	Hexachlorocyclopentadiene 2,4-Dinitrophenol	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
K2502505	TO63-R3-SB01-0-0.5	N-Nitroso-di-n-propylamine	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
K2502505	TO63-R3-SB04-0-0.5 TO63-R3-SB01-0-0.5 TO63-R3-SB01-4-5 TO63-R3-SB02-0-0.5 TO63-R3-SB03-0-0.5** TO63-R4-SB03-0-0.5 TO63-R4-SB03-3-4 TO63-R4-SB02-0-0.5 TO63-R4-SB01-0-0.5** TO63-SPN-SB03-4-5 TO63-SPN-SB01-0-0.5 TO63-SPN-SB01-0-0.5 Dup TO63-SPN-SB01-3-4** TO63-RSP-SB02-0-0.5 TO63-RSP-SB02-5-6** TO63-RSP-SB03-0-0.5 TO63-RSP-SB03-5-6 TO63-R3-SB04-2-3**	3,3'-Dichlorobenzidine	J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D)

Ballfields Parcels at DoDHF Novato, CA
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG K2502505

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
K2502505	TO63-R3-SB04-0-0.5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	10U ug/Kg 200U ug/Kg	A
K2502505	TO63-R3-SB04-2-3**	Bis(2-ethylhexyl)phthalate	200U ug/Kg	A
K2502505	TO63-R3-SB01-0-0.5	Di-n-butylphthalate	15U ug/Kg	A
K2502505	TO63-R3-SB01-4-5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	10U ug/Kg 200U ug/Kg	A
K2502505	TO63-R3-SB02-0-0.5	Di-n-butylphthalate	22U ug/Kg	A
K2502505	TO63-R3-SB03-0-0.5**	Di-n-butylphthalate	15U ug/Kg	A
K2502505	TO63-R4-SB03-0-0.5 (5x)	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	50U ug/Kg 1000U ug/Kg	A
K2502505	TO63-R4-SB03-3-4	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	13U ug/Kg 200U ug/Kg	A
K2502505	TO63-R4-SB02-0-0.5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	27U ug/Kg 200U ug/Kg	A
K2502505	TO63-R4-SB01-0-0.5**	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	17U ug/Kg 200U ug/Kg	A
K2502505	TO63-SPN-SB03-4-5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	35U ug/Kg 200U ug/Kg	A
K2502505	TO63-SPN-SB01-0-0.5 (5x)	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	50U ug/Kg 1000U ug/Kg	A
K2502505	TO63-SPN-SB01-0-0.5 Dup (5x)	Bis(2-ethylhexyl)phthalate	990U ug/Kg	A
K2502505	TO63-SPN-SB01-3-4**	Di-n-butylphthalate	29U ug/Kg	A
K2502505	TO63-RSP-SB02-0-0.5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	41U ug/Kg 200U ug/Kg	A
K2502505	TO63-RSP-SB02-5-6**	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	36U ug/Kg 200U ug/Kg	A

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
K2502505	TO63-RSP-SB03-0-0.5	Di-n-butylphthalate	35U ug/Kg	A
K2502505	TO63-RSP-SB03-5-6	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	28U ug/Kg 200U ug/Kg	A

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R3-SB04-0-0.5
Lab Code: K2502505-001

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	10	5.6	1	04/13/05	05/04/05	KWG0505825	
Phenol	ND	U	30	2.2	1	04/13/05	05/04/05	KWG0505825	
Bis(2-chloroethyl) Ether	ND	U	10	2.8	1	04/13/05	05/04/05	KWG0505825	
2-Chlorophenol	ND	U	10	2.0	1	04/13/05	05/04/05	KWG0505825	
2-Methylphenol	ND	U	10	3.9	1	04/13/05	05/04/05	KWG0505825	
Bis(2-chloroisopropyl) Ether	ND	U	10	1.4	1	04/13/05	05/04/05	KWG0505825	
Acetophenone	ND	U	50	14	1	04/13/05	05/04/05	KWG0505825	
4-Methylphenol†	ND	U	10	3.3	1	04/13/05	05/04/05	KWG0505825	
N-Nitrosodi-n-propylamine	ND	U	10	3.7	1	04/13/05	05/04/05	KWG0505825	
Hexachloroethane	ND	U	10	2.5	1	04/13/05	05/04/05	KWG0505825	
Nitrobenzene	ND	U	10	2.3	1	04/13/05	05/04/05	KWG0505825	
Isophorone	ND	U	10	1.9	1	04/13/05	05/04/05	KWG0505825	
2-Nitrophenol	ND	U	10	3.0	1	04/13/05	05/04/05	KWG0505825	
2,4-Dimethylphenol	ND	U	50	6.3	1	04/13/05	05/04/05	KWG0505825	
Bis(2-chloroethoxy)methane	ND	U	10	1.5	1	04/13/05	05/04/05	KWG0505825	
2,4-Dichlorophenol	ND	U	10	2.1	1	04/13/05	05/04/05	KWG0505825	
Naphthalene	ND	U	10	1.5	1	04/13/05	05/04/05	KWG0505825	
4-Chloroaniline	ND	U	10	2.4	1	04/13/05	05/04/05	KWG0505825	
Hexachlorobutadiene	ND	U	10	1.6	1	04/13/05	05/04/05	KWG0505825	
Caprolactam	**19**	J	20	14	1	04/13/05	05/04/05	KWG0505825	
Benzaldehyde	**11**	J	20	10	1	04/13/05	05/04/05	KWG0505825	
4-Chloro-3-methylphenol	ND	U	10	2.4	1	04/13/05	05/04/05	KWG0505825	
2-Methylnaphthalene	ND	U	10	1.4	1	04/13/05	05/04/05	KWG0505825	
Hexachlorocyclopentadiene	ND	U UJ	50	17	1	04/13/05	05/04/05	KWG0505825	
2,4,6-Trichlorophenol	ND	U	10	2.1	1	04/13/05	05/04/05	KWG0505825	
2,4,5-Trichlorophenol	ND	U	10	3.4	1	04/13/05	05/04/05	KWG0505825	
Biphenyl	ND	U	20	5.5	1	04/13/05	05/04/05	KWG0505825	
2-Chloronaphthalene	ND	U	10	4.1	1	04/13/05	05/04/05	KWG0505825	
2-Nitroaniline	ND	U	20	3.1	1	04/13/05	05/04/05	KWG0505825	
Dimethyl Phthalate	ND	U	10	2.1	1	04/13/05	05/04/05	KWG0505825	
2,6-Dinitrotoluene	ND	U	10	3.2	1	04/13/05	05/04/05	KWG0505825	
Acenaphthylene	ND	U	10	1.6	1	04/13/05	05/04/05	KWG0505825	
3-Nitroaniline	ND	U	20	3.0	1	04/13/05	05/04/05	KWG0505825	

6/9/05

Comments:

Client:	Battelle Memorial Institute	**Service Request:**	K2502505
Project:	Novato Ballfields/G486063	**Date Collected:**	04/06/2005
Sample Matrix:	Soil	**Date Received:**	04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	TO63-R3-SB04-0-0.5	**Units:**	ug/Kg
Lab Code:	K2502505-001	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U	10	1.2	1	04/13/05	05/04/05	KWG0505825	
2,4-Dinitrophenol	ND	U UJ	200	41	1	04/13/05	05/04/05	KWG0505825	
4-Nitrophenol	ND	U	100	34	1	04/13/05	05/04/05	KWG0505825	
Dibenzofuran	ND	U	10	1.5	1	04/13/05	05/04/05	KWG0505825	
2,4-Dinitrotoluene	ND	U	10	3.2	1	04/13/05	05/04/05	KWG0505825	
Diethyl Phthalate	ND	U	10	4.0	1	04/13/05	05/04/05	KWG0505825	
Fluorene	ND	U	10	2.0	1	04/13/05	05/04/05	KWG0505825	
4-Chlorophenyl Phenyl Ether	ND	U	10	2.3	1	04/13/05	05/04/05	KWG0505825	
4-Nitroaniline	ND	U	20	3.9	1	04/13/05	05/04/05	KWG0505825	
2-Methyl-4,6-dinitrophenol	ND	U UJ	100	2.0	1	04/13/05	05/04/05	KWG0505825	
N-Nitrosodiphenylamine	ND	U	10	2.5	1	04/13/05	05/04/05	KWG0505825	
4-Bromophenyl Phenyl Ether	ND	U	10	1.6	1	04/13/05	05/04/05	KWG0505825	
Hexachlorobenzene	ND	U	10	2.4	1	04/13/05	05/04/05	KWG0505825	
Atrazine	ND	U	10	2.5	1	04/13/05	05/04/05	KWG0505825	
Pentachlorophenol	ND	U	100	9.7	1	04/13/05	05/04/05	KWG0505825	
Phenanthrene	ND	U	10	1.5	1	04/13/05	05/04/05	KWG0505825	
Anthracene	ND	U	10	1.6	1	04/13/05	05/04/05	KWG0505825	
Carbazole	ND	U	10	1.5	1	04/13/05	05/04/05	KWG0505825	
Di-n-butyl Phthalate	**8.6**	J 10U	10	3.0	1	04/13/05	05/04/05	KWG0505825	
Fluoranthene	ND	U	10	2.5	1	04/13/05	05/04/05	KWG0505825	
Pyrene	ND	U	10	1.5	1	04/13/05	05/04/05	KWG0505825	
Butyl Benzyl Phthalate	ND	U	10	1.7	1	04/13/05	05/04/05	KWG0505825	
3,3'-Dichlorobenzidine	ND	U UJ	100	4.2	1	04/13/05	05/04/05	KWG0505825	
Benz(a)anthracene	ND	U	10	1.6	1	04/13/05	05/04/05	KWG0505825	
Chrysene	ND	U	10	1.6	1	04/13/05	05/04/05	KWG0505825	
Bis(2-ethylhexyl) Phthalate	**62**	J 200U	200	2.0	1	04/13/05	05/04/05	KWG0505825	
Di-n-octyl Phthalate	ND	U	10	1.4	1	04/13/05	05/04/05	KWG0505825	
Benzo(b)fluoranthene	ND	U	10	2.9	1	04/13/05	05/04/05	KWG0505825	
Benzo(k)fluoranthene	ND	U	10	2.9	1	04/13/05	05/04/05	KWG0505825	
Benzo(a)pyrene	ND	U	10	1.9	1	04/13/05	05/04/05	KWG0505825	
Indeno(1,2,3-cd)pyrene	ND	U	10	2.2	1	04/13/05	05/04/05	KWG0505825	
Dibenz(a,h)anthracene	ND	U	10	2.5	1	04/13/05	05/04/05	KWG0505825	
Benzo(g,h,i)perylene	ND	U	10	2.6	1	04/13/05	05/04/05	KWG0505825	

Comments:

6/19/05

Client:	Battelle Memorial Institute	**Service Request:**	K2502505
Project:	Novato Ballfields/G486063	**Date Collected:**	04/06/2005
Sample Matrix:	Soil	**Date Received:**	04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	TO63-R3-SB04-0-0.5	**Units:**	ug/Kg
Lab Code:	K2502505-001	**Basis:**	Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	64	11-87	05/04/05	Acceptable
Phenol-d6	71	20-99	05/04/05	Acceptable
Nitrobenzene-d5	68	10-99	05/04/05	Acceptable
2-Fluorobiphenyl	78	10-104	05/04/05	Acceptable
2,4,6-Tribromophenol	87	23-113	05/04/05	Acceptable
Terphenyl-d14	99	39-124	05/04/05	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

6/19/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R3-SB04-2-3
Lab Code: K2502505-002

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	10	8.4	1	04/13/05	05/08/05	KWG0505825	
Phenol	**4.3**	J	30	3.3	1	04/13/05	05/08/05	KWG0505825	
Bis(2-chloroethyl) Ether	ND	U	10	4.1	1	04/13/05	05/08/05	KWG0505825	
2-Chlorophenol	ND	U	10	2.9	1	04/13/05	05/08/05	KWG0505825	
2-Methylphenol	ND	U	10	5.8	1	04/13/05	05/08/05	KWG0505825	
Bis(2-chloroisopropyl) Ether	ND	U	10	2.1	1	04/13/05	05/08/05	KWG0505825	
Acetophenone	ND	U	50	21	1	04/13/05	05/08/05	KWG0505825	
4-Methylphenol†	ND	U	10	5.0	1	04/13/05	05/08/05	KWG0505825	
N-Nitrosodi-n-propylamine	ND	U	10	5.5	1	04/13/05	05/08/05	KWG0505825	
Hexachloroethane	ND	U	10	3.8	1	04/13/05	05/08/05	KWG0505825	
Nitrobenzene	ND	U	10	3.4	1	04/13/05	05/08/05	KWG0505825	
Isophorone	ND	U	10	2.8	1	04/13/05	05/08/05	KWG0505825	
2-Nitrophenol	ND	U	10	4.5	1	04/13/05	05/08/05	KWG0505825	
2,4-Dimethylphenol	ND	U	50	9.4	1	04/13/05	05/08/05	KWG0505825	
Bis(2-chloroethoxy)methane	ND	U	10	2.3	1	04/13/05	05/08/05	KWG0505825	
2,4-Dichlorophenol	ND	U	10	3.1	1	04/13/05	05/08/05	KWG0505825	
Naphthalene	ND	U	10	2.3	1	04/13/05	05/08/05	KWG0505825	
4-Chloroaniline	ND	U	10	3.6	1	04/13/05	05/08/05	KWG0505825	
Hexachlorobutadiene	ND	U	10	2.4	1	04/13/05	05/08/05	KWG0505825	
Caprolactam	ND	U	21	21	1	04/13/05	05/08/05	KWG0505825	
Benzaldehyde	**17**	J	20	15	1	04/13/05	05/08/05	KWG0505825	
4-Chloro-3-methylphenol	ND	U	10	3.6	1	04/13/05	05/08/05	KWG0505825	
2-Methylnaphthalene	ND	U	10	2.1	1	04/13/05	05/08/05	KWG0505825	
Hexachlorocyclopentadiene	ND	U	50	26	1	04/13/05	05/08/05	KWG0505825	
2,4,6-Trichlorophenol	ND	U	10	3.1	1	04/13/05	05/08/05	KWG0505825	
2,4,5-Trichlorophenol	ND	U	10	5.1	1	04/13/05	05/08/05	KWG0505825	
Biphenyl	ND	U	20	8.2	1	04/13/05	05/08/05	KWG0505825	
2-Chloronaphthalene	ND	U	10	6.2	1	04/13/05	05/08/05	KWG0505825	
2-Nitroaniline	ND	U	20	4.6	1	04/13/05	05/08/05	KWG0505825	
Dimethyl Phthalate	ND	U	10	3.1	1	04/13/05	05/08/05	KWG0505825	
2,6-Dinitrotoluene	ND	U	10	4.8	1	04/13/05	05/08/05	KWG0505825	
Acenaphthylene	ND	U	10	2.4	1	04/13/05	05/08/05	KWG0505825	
3-Nitroaniline	ND	U	20	4.5	1	04/13/05	05/08/05	KWG0505825	

Comments:

Client:	Battelle Memorial Institute	**Service Request:**	K2502505
Project:	Novato Ballfields/G486063	**Date Collected:**	04/06/2005
Sample Matrix:	Soil	**Date Received:**	04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	TO63-R3-SB04-2-3	**Units:**	ug/Kg
Lab Code:	K2502505-002	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U	10	1.7	1	04/13/05	05/08/05	KWG0505825	
2,4-Dinitrophenol	ND	U UJ	200	62	1	04/13/05	05/08/05	KWG0505825	
4-Nitrophenol	ND	U	100	51	1	04/13/05	05/08/05	KWG0505825	
Dibenzofuran	ND	U	10	2.3	1	04/13/05	05/08/05	KWG0505825	
2,4-Dinitrotoluene	ND	U	10	4.8	1	04/13/05	05/08/05	KWG0505825	
Diethyl Phthalate	ND	U	10	6.0	1	04/13/05	05/08/05	KWG0505825	
Fluorene	ND	U	10	2.9	1	04/13/05	05/08/05	KWG0505825	
4-Chlorophenyl Phenyl Ether	ND	U	10	3.4	1	04/13/05	05/08/05	KWG0505825	
4-Nitroaniline	ND	U	20	5.8	1	04/13/05	05/08/05	KWG0505825	
2-Methyl-4,6-dinitrophenol	ND	U	100	2.9	1	04/13/05	05/08/05	KWG0505825	
N-Nitrosodiphenylamine	ND	U	10	3.8	1	04/13/05	05/08/05	KWG0505825	
4-Bromophenyl Phenyl Ether	ND	U	10	2.4	1	04/13/05	05/08/05	KWG0505825	
Hexachlorobenzene	ND	U	10	3.6	1	04/13/05	05/08/05	KWG0505825	
Atrazine	ND	U	10	3.8	1	04/13/05	05/08/05	KWG0505825	
Pentachlorophenol	ND	U	100	15	1	04/13/05	05/08/05	KWG0505825	
Phenanthrene	ND	U	10	2.3	1	04/13/05	05/08/05	KWG0505825	
Anthracene	ND	U	10	2.4	1	04/13/05	05/08/05	KWG0505825	
Carbazole	ND	U	10	2.3	1	04/13/05	05/08/05	KWG0505825	
Di-n-butyl Phthalate	ND	U	10	4.5	1	04/13/05	05/08/05	KWG0505825	
Fluoranthene	ND	U	10	3.8	1	04/13/05	05/08/05	KWG0505825	
Pyrene	ND	U	10	2.3	1	04/13/05	05/08/05	KWG0505825	
Butyl Benzyl Phthalate	ND	U	10	2.6	1	04/13/05	05/08/05	KWG0505825	
3,3'-Dichlorobenzidine	ND	U UJ	100	6.3	1	04/13/05	05/08/05	KWG0505825	
Benz(a)anthracene	ND	U	10	2.4	1	04/13/05	05/08/05	KWG0505825	
Chrysene	ND	U	10	2.4	1	04/13/05	05/08/05	KWG0505825	
Bis(2-ethylhexyl) Phthalate	**20**	J 200U	200	2.9	1	04/13/05	05/08/05	KWG0505825	
Di-n-octyl Phthalate	ND	U	10	2.1	1	04/13/05	05/08/05	KWG0505825	
Benzo(b)fluoranthene	ND	U	10	4.3	1	04/13/05	05/08/05	KWG0505825	
Benzo(k)fluoranthene	ND	U	10	4.3	1	04/13/05	05/08/05	KWG0505825	
Benzo(a)pyrene	ND	U	10	2.8	1	04/13/05	05/08/05	KWG0505825	
Indeno(1,2,3-cd)pyrene	ND	U	10	3.3	1	04/13/05	05/08/05	KWG0505825	
Dibenz(a,h)anthracene	ND	U	10	3.8	1	04/13/05	05/08/05	KWG0505825	
Benzo(g,h,i)perylene	ND	U	10	3.9	1	04/13/05	05/08/05	KWG0505825	

Comments:

6/19/05

Client:	Battelle Memorial Institute	**Service Request:**	K2502505
Project:	Novato Ballfields/G486063	**Date Collected:**	04/06/2005
Sample Matrix:	Soil	**Date Received:**	04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	TO63-R3-SB04-2-3	**Units:**	ug/Kg
Lab Code:	K2502505-002	**Basis:**	Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	47	11-87	05/08/05	Acceptable
Phenol-d6	54	20-99	05/08/05	Acceptable
Nitrobenzene-d5	46	10-99	05/08/05	Acceptable
2-Fluorobiphenyl	47	10-104	05/08/05	Acceptable
2,4,6-Tribromophenol	57	23-113	05/08/05	Acceptable
Terphenyl-d14	65	39-124	05/08/05	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

6/19/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R3-SB01-0-0.5
Lab Code: K2502505-003

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	10	6.9	1	04/13/05	05/10/05	KWG0505825	
Phenol	ND	U	30	2.7	1	04/13/05	05/10/05	KWG0505825	
Bis(2-chloroethyl) Ether	ND	U	10	3.4	1	04/13/05	05/10/05	KWG0505825	
2-Chlorophenol	ND	U	10	2.4	1	04/13/05	05/10/05	KWG0505825	
2-Methylphenol	ND	U	10	4.8	1	04/13/05	05/10/05	KWG0505825	
Bis(2-chloroisopropyl) Ether	ND	U	10	1.7	1	04/13/05	05/10/05	KWG0505825	
Acetophenone	ND	U	50	17	1	04/13/05	05/10/05	KWG0505825	
4-Methylphenol†	ND	U	10	4.1	1	04/13/05	05/10/05	KWG0505825	
N-Nitrosodi-n-propylamine	ND	U UJ	10	4.5	1	04/13/05	05/10/05	KWG0505825	
Hexachloroethane	ND	U	10	3.1	1	04/13/05	05/10/05	KWG0505825	
Nitrobenzene	ND	U	10	2.8	1	04/13/05	05/10/05	KWG0505825	
Isophorone	ND	U	10	2.3	1	04/13/05	05/10/05	KWG0505825	
2-Nitrophenol	ND	U	10	3.7	1	04/13/05	05/10/05	KWG0505825	
2,4-Dimethylphenol	ND	U	50	7.7	1	04/13/05	05/10/05	KWG0505825	
Bis(2-chloroethoxy)methane	ND	U	10	1.9	1	04/13/05	05/10/05	KWG0505825	
2,4-Dichlorophenol	ND	U	10	2.6	1	04/13/05	05/10/05	KWG0505825	
Naphthalene	ND	U	10	1.9	1	04/13/05	05/10/05	KWG0505825	
4-Chloroaniline	ND	U	10	3.0	1	04/13/05	05/10/05	KWG0505825	
Hexachlorobutadiene	ND	U	10	2.0	1	04/13/05	05/10/05	KWG0505825	
Caprolactam	ND	U	20	17	1	04/13/05	05/10/05	KWG0505825	
Benzaldehyde	**14**	J	20	13	1	04/13/05	05/10/05	KWG0505825	
4-Chloro-3-methylphenol	ND	U	10	3.0	1	04/13/05	05/10/05	KWG0505825	
2-Methylnaphthalene	ND	U	10	1.7	1	04/13/05	05/10/05	KWG0505825	
Hexachlorocyclopentadiene	ND	U	50	21	1	04/13/05	05/10/05	KWG0505825	
2,4,6-Trichlorophenol	ND	U	10	2.6	1	04/13/05	05/10/05	KWG0505825	
2,4,5-Trichlorophenol	ND	U	10	4.2	1	04/13/05	05/10/05	KWG0505825	
Biphenyl	ND	U	20	6.8	1	04/13/05	05/10/05	KWG0505825	
2-Chloronaphthalene	ND	U	10	5.1	1	04/13/05	05/10/05	KWG0505825	
2-Nitroaniline	ND	U	20	3.8	1	04/13/05	05/10/05	KWG0505825	
Dimethyl Phthalate	ND	U	10	2.6	1	04/13/05	05/10/05	KWG0505825	
2,6-Dinitrotoluene	ND	U	10	4.0	1	04/13/05	05/10/05	KWG0505825	
Acenaphthylene	ND	U	10	2.0	1	04/13/05	05/10/05	KWG0505825	
3-Nitroaniline	ND	U	20	3.7	1	04/13/05	05/10/05	KWG0505825	

6/19/05

Comments:

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R3-SB01-0-0.5
Lab Code: K2502505-003

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U	10	1.4	1	04/13/05	05/10/05	KWG0505825	
2,4-Dinitrophenol	ND	U	200	51	1	04/13/05	05/10/05	KWG0505825	
4-Nitrophenol	ND	U	100	42	1	04/13/05	05/10/05	KWG0505825	
Dibenzofuran	ND	U	10	1.9	1	04/13/05	05/10/05	KWG0505825	
2,4-Dinitrotoluene	ND	U	10	4.0	1	04/13/05	05/10/05	KWG0505825	
Diethyl Phthalate	ND	U	10	4.9	1	04/13/05	05/10/05	KWG0505825	
Fluorene	ND	U	10	2.4	1	04/13/05	05/10/05	KWG0505825	
4-Chlorophenyl Phenyl Ether	ND	U	10	2.8	1	04/13/05	05/10/05	KWG0505825	
4-Nitroaniline	ND	U	20	4.8	1	04/13/05	05/10/05	KWG0505825	
2-Methyl-4,6-dinitrophenol	ND	U UJ	100	2.4	1	04/13/05	05/10/05	KWG0505825	
N-Nitrosodiphenylamine	ND	U	10	3.1	1	04/13/05	05/10/05	KWG0505825	
4-Bromophenyl Phenyl Ether	ND	U	10	2.0	1	04/13/05	05/10/05	KWG0505825	
Hexachlorobenzene	ND	U	10	3.0	1	04/13/05	05/10/05	KWG0505825	
Atrazine	ND	U	10	3.1	1	04/13/05	05/10/05	KWG0505825	
Pentachlorophenol	ND	U	100	12	1	04/13/05	05/10/05	KWG0505825	
Phenanthrene	ND	U	10	1.9	1	04/13/05	05/10/05	KWG0505825	
Anthracene	ND	U	10	2.0	1	04/13/05	05/10/05	KWG0505825	
Carbazole	ND	U	10	1.9	1	04/13/05	05/10/05	KWG0505825	
Di-n-butyl Phthalate	**15**	U	10	3.7	1	04/13/05	05/10/05	KWG0505825	
Fluoranthene	ND	U	10	3.1	1	04/13/05	05/10/05	KWG0505825	
Pyrene	ND	U	10	1.9	1	04/13/05	05/10/05	KWG0505825	
Butyl Benzyl Phthalate	**2.2**	J	10	2.1	1	04/13/05	05/10/05	KWG0505825	
3,3'-Dichlorobenzidine	ND	U UJ	100	5.2	1	04/13/05	05/10/05	KWG0505825	
Benz(a)anthracene	ND	U	10	2.0	1	04/13/05	05/10/05	KWG0505825	
Chrysene	ND	U	10	2.0	1	04/13/05	05/10/05	KWG0505825	
Bis(2-ethylhexyl) Phthalate	**250**		200	2.4	1	04/13/05	05/10/05	KWG0505825	
Di-n-octyl Phthalate	ND	U	10	1.7	1	04/13/05	05/10/05	KWG0505825	
Benzo(b)fluoranthene	ND	U	10	3.5	1	04/13/05	05/10/05	KWG0505825	
Benzo(k)fluoranthene	ND	U	10	3.5	1	04/13/05	05/10/05	KWG0505825	
Benzo(a)pyrene	ND	U	10	2.3	1	04/13/05	05/10/05	KWG0505825	
Indeno(1,2,3-cd)pyrene	ND	U	10	2.7	1	04/13/05	05/10/05	KWG0505825	
Dibenz(a,h)anthracene	ND	U	10	3.1	1	04/13/05	05/10/05	KWG0505825	
Benzo(g,h,i)perylene	ND	U	10	3.3	1	04/13/05	05/10/05	KWG0505825	

6/19/05

Comments:

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R3-SB01-0-0.5
Lab Code: K2502505-003

Units: ug/Kg
Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	51	11-87	05/10/05	Acceptable
Phenol-d6	55	20-99	05/10/05	Acceptable
Nitrobenzene-d5	49	10-99	05/10/05	Acceptable
2-Fluorobiphenyl	61	10-104	05/10/05	Acceptable
2,4,6-Tribromophenol	72	23-113	05/10/05	Acceptable
Terphenyl-d14	80	39-124	05/10/05	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

6/9/05

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R3-SB01-4-5
Lab Code: K2502505-004

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	10	5.6	1	04/13/05	05/05/05	KWG0505825	
Phenol	ND	U	30	2.2	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethyl) Ether	ND	U	10	2.8	1	04/13/05	05/05/05	KWG0505825	
2-Chlorophenol	ND	U	10	2.0	1	04/13/05	05/05/05	KWG0505825	
2-Methylphenol	ND	U	10	3.9	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroisopropyl) Ether	ND	U	10	1.4	1	04/13/05	05/05/05	KWG0505825	
Acetophenone	ND	U	50	14	1	04/13/05	05/05/05	KWG0505825	
4-Methylphenol†	ND	U	10	3.4	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodi-n-propylamine	ND	U	10	3.7	1	04/13/05	05/05/05	KWG0505825	
Hexachloroethane	ND	U	10	2.6	1	04/13/05	05/05/05	KWG0505825	
Nitrobenzene	ND	U	10	2.3	1	04/13/05	05/05/05	KWG0505825	
Isophorone	ND	U	10	1.9	1	04/13/05	05/05/05	KWG0505825	
2-Nitrophenol	ND	U	10	3.0	1	04/13/05	05/05/05	KWG0505825	
2,4-Dimethylphenol	ND	U	50	6.3	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethoxy)methane	ND	U	10	1.5	1	04/13/05	05/05/05	KWG0505825	
2,4-Dichlorophenol	ND	U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
Naphthalene	ND	U	10	1.5	1	04/13/05	05/05/05	KWG0505825	
4-Chloroaniline	ND	U	10	2.4	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobutadiene	ND	U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
Caprolactam	ND	U	20	14	1	04/13/05	05/05/05	KWG0505825	
Benzaldehyde	ND	U	20	11	1	04/13/05	05/05/05	KWG0505825	
4-Chloro-3-methylphenol	ND	U	10	2.4	1	04/13/05	05/05/05	KWG0505825	
2-Methylnaphthalene	ND	U	10	1.4	1	04/13/05	05/05/05	KWG0505825	
Hexachlorocyclopentadiene	ND	U	50	18	1	04/13/05	05/05/05	KWG0505825	
2,4,6-Trichlorophenol	ND	U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
2,4,5-Trichlorophenol	ND	U	10	3.5	1	04/13/05	05/05/05	KWG0505825	
Biphenyl	ND	U	20	5.5	1	04/13/05	05/05/05	KWG0505825	
2-Chloronaphthalene	ND	U	10	4.2	1	04/13/05	05/05/05	KWG0505825	
2-Nitroaniline	ND	U	20	3.1	1	04/13/05	05/05/05	KWG0505825	
Dimethyl Phthalate	ND	U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
2,6-Dinitrotoluene	ND	U	10	3.2	1	04/13/05	05/05/05	KWG0505825	
Acenaphthylene	ND	U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
3-Nitroaniline	ND	U	20	3.0	1	04/13/05	05/05/05	KWG0505825	

6/19/05

Comments:

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R3-SB01-4-5
Lab Code: K2502505-004

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry

Level: Low

Analyte Name	Result	Q		MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U		10	1.2	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrophenol	ND	U		200	42	1	04/13/05	05/05/05	KWG0505825	
4-Nitrophenol	ND	U		100	35	1	04/13/05	05/05/05	KWG0505825	
Dibenzofuran	ND	U		10	1.5	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrotoluene	ND	U		10	3.2	1	04/13/05	05/05/05	KWG0505825	
Diethyl Phthalate	ND	U		10	4.0	1	04/13/05	05/05/05	KWG0505825	
Fluorene	ND	U		10	2.0	1	04/13/05	05/05/05	KWG0505825	
4-Chlorophenyl Phenyl Ether	ND	U		10	2.3	1	04/13/05	05/05/05	KWG0505825	
4-Nitroaniline	ND	U		20	3.9	1	04/13/05	05/05/05	KWG0505825	
2-Methyl-4,6-dinitrophenol	ND	U	UJ	100	2.0	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodiphenylamine	ND	U		10	2.6	1	04/13/05	05/05/05	KWG0505825	
4-Bromophenyl Phenyl Ether	ND	U		10	1.6	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobenzene	ND	U		10	2.4	1	04/13/05	05/05/05	KWG0505825	
Atrazine	ND	U		10	2.6	1	04/13/05	05/05/05	KWG0505825	
Pentachlorophenol	ND	U		100	9.8	1	04/13/05	05/05/05	KWG0505825	
Phenanthrene	ND	U		10	1.5	1	04/13/05	05/05/05	KWG0505825	
Anthracene	ND	U		10	1.6	1	04/13/05	05/05/05	KWG0505825	
Carbazole	ND	U		10	1.5	1	04/13/05	05/05/05	KWG0505825	
Di-n-butyl Phthalate	**9.1**	J	10U	10	3.0	1	04/13/05	05/05/05	KWG0505825	
Fluoranthene	ND	U		10	2.6	1	04/13/05	05/05/05	KWG0505825	
Pyrene	ND	U		10	1.5	1	04/13/05	05/05/05	KWG0505825	
Butyl Benzyl Phthalate	ND	U		10	1.8	1	04/13/05	05/05/05	KWG0505825	
3,3'-Dichlorobenzidine	ND	U	UJ	100	4.3	1	04/13/05	05/05/05	KWG0505825	
Benz(a)anthracene	ND	U		10	1.6	1	04/13/05	05/05/05	KWG0505825	
Chrysene	ND	U		10	1.6	1	04/13/05	05/05/05	KWG0505825	
Bis(2-ethylhexyl) Phthalate	**51**	J	200U	200	2.0	1	04/13/05	05/05/05	KWG0505825	
Di-n-octyl Phthalate	ND	U		10	1.4	1	04/13/05	05/05/05	KWG0505825	
Benzo(b)fluoranthene	ND	U		10	2.9	1	04/13/05	05/05/05	KWG0505825	
Benzo(k)fluoranthene	ND	U		10	2.9	1	04/13/05	05/05/05	KWG0505825	
Benzo(a)pyrene	ND	U		10	1.9	1	04/13/05	05/05/05	KWG0505825	
Indeno(1,2,3-cd)pyrene	ND	U		10	2.2	1	04/13/05	05/05/05	KWG0505825	
Dibenz(a,h)anthracene	ND	U		10	2.6	1	04/13/05	05/05/05	KWG0505825	
Benzo(g,h,i)perylene	ND	U		10	2.7	1	04/13/05	05/05/05	KWG0505825	

Comments:

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R3-SB01-4-5
Lab Code: K2502505-004

Units: ug/Kg
Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	57	11-87	05/05/05	Acceptable
Phenol-d6	66	20-99	05/05/05	Acceptable
Nitrobenzene-d5	62	10-99	05/05/05	Acceptable
2-Fluorobiphenyl	70	10-104	05/05/05	Acceptable
2,4,6-Tribromophenol	78	23-113	05/05/05	Acceptable
Terphenyl-d14	103	39-124	05/05/05	Acceptable

† **Analyte Comments**

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

5/11/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R3-SB02-0-0.5
Lab Code: K2502505-005

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	10	5.6	1	04/13/05	05/05/05	KWG0505825	
Phenol	**2.8**	J	30	2.2	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethyl) Ether	ND	U	10	2.8	1	04/13/05	05/05/05	KWG0505825	
2-Chlorophenol	ND	U	10	2.0	1	04/13/05	05/05/05	KWG0505825	
2-Methylphenol	ND	U	10	3.9	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroisopropyl) Ether	ND	U	10	1.4	1	04/13/05	05/05/05	KWG0505825	
Acetophenone	**23**	J	50	14	1	04/13/05	05/05/05	KWG0505825	
4-Methylphenol†	ND	U	10	3.3	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodi-n-propylamine	ND	U	10	3.7	1	04/13/05	05/05/05	KWG0505825	
Hexachloroethane	ND	U	10	2.5	1	04/13/05	05/05/05	KWG0505825	
Nitrobenzene	ND	U	10	2.3	1	04/13/05	05/05/05	KWG0505825	
Isophorone	ND	U	10	1.9	1	04/13/05	05/05/05	KWG0505825	
2-Nitrophenol	ND	U	10	3.0	1	04/13/05	05/05/05	KWG0505825	
2,4-Dimethylphenol	ND	U	50	6.3	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethoxy)methane	ND	U	10	1.5	1	04/13/05	05/05/05	KWG0505825	
2,4-Dichlorophenol	ND	U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
Naphthalene	ND	U	10	1.5	1	04/13/05	05/05/05	KWG0505825	
4-Chloroaniline	ND	U	10	2.4	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobutadiene	ND	U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
Caprolactam	ND	U	20	14	1	04/13/05	05/05/05	KWG0505825	
Benzaldehyde	**11**	J	20	10	1	04/13/05	05/05/05	KWG0505825	
4-Chloro-3-methylphenol	ND	U	10	2.4	1	04/13/05	05/05/05	KWG0505825	
2-Methylnaphthalene	ND	U	10	1.4	1	04/13/05	05/05/05	KWG0505825	
Hexachlorocyclopentadiene	ND	U	50	18	1	04/13/05	05/05/05	KWG0505825	
2,4,6-Trichlorophenol	ND	U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
2,4,5-Trichlorophenol	ND	U	10	3.5	1	04/13/05	05/05/05	KWG0505825	
Biphenyl	ND	U	20	5.5	1	04/13/05	05/05/05	KWG0505825	
2-Chloronaphthalene	ND	U	10	4.1	1	04/13/05	05/05/05	KWG0505825	
2-Nitroaniline	ND	U	20	3.1	1	04/13/05	05/05/05	KWG0505825	
Dimethyl Phthalate	ND	U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
2,6-Dinitrotoluene	ND	U	10	3.2	1	04/13/05	05/05/05	KWG0505825	
Acenaphthylene	ND	U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
3-Nitroaniline	ND	U	20	3.0	1	04/13/05	05/05/05	KWG0505825	

Comments:

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R3-SB02-0-0.5
Lab Code: K2502505-005

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U	10	1.2	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrophenol	ND	U	200	41	1	04/13/05	05/05/05	KWG0505825	
4-Nitrophenol	ND	U	100	35	1	04/13/05	05/05/05	KWG0505825	
Dibenzofuran	ND	U	10	1.5	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrotoluene	ND	U	10	3.2	1	04/13/05	05/05/05	KWG0505825	
Diethyl Phthalate	ND	U	10	4.0	1	04/13/05	05/05/05	KWG0505825	
Fluorene	ND	U	10	2.0	1	04/13/05	05/05/05	KWG0505825	
4-Chlorophenyl Phenyl Ether	ND	U	10	2.3	1	04/13/05	05/05/05	KWG0505825	
4-Nitroaniline	ND	U	20	3.9	1	04/13/05	05/05/05	KWG0505825	
2-Methyl-4,6-dinitrophenol	ND	U UJ	100	2.0	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodiphenylamine	ND	U	10	2.5	1	04/13/05	05/05/05	KWG0505825	
4-Bromophenyl Phenyl Ether	ND	U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobenzene	ND	U	10	2.4	1	04/13/05	05/05/05	KWG0505825	
Atrazine	ND	U	10	2.5	1	04/13/05	05/05/05	KWG0505825	
Pentachlorophenol	ND	U	100	9.7	1	04/13/05	05/05/05	KWG0505825	
Phenanthrene	**3.6**	J	10	1.5	1	04/13/05	05/05/05	KWG0505825	
Anthracene	ND	U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
Carbazole	ND	U	10	1.5	1	04/13/05	05/05/05	KWG0505825	
Di-n-butyl Phthalate	**22**	U	10	3.0	1	04/13/05	05/05/05	KWG0505825	
Fluoranthene	**4.8**	J	10	2.5	1	04/13/05	05/05/05	KWG0505825	
Pyrene	**4.3**	J	10	1.5	1	04/13/05	05/05/05	KWG0505825	
Butyl Benzyl Phthalate	**1.8**	J	10	1.8	1	04/13/05	05/05/05	KWG0505825	
3,3'-Dichlorobenzidine	ND	U UJ	100	4.2	1	04/13/05	05/05/05	KWG0505825	
Benz(a)anthracene	ND	U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
Chrysene	**5.1**	J	10	1.6	1	04/13/05	05/05/05	KWG0505825	
Bis(2-ethylhexyl) Phthalate	**130**	J	200	2.0	1	04/13/05	05/05/05	KWG0505825	
Di-n-octyl Phthalate	ND	U	10	1.4	1	04/13/05	05/05/05	KWG0505825	
Benzo(b)fluoranthene	**4.6**	J	10	2.9	1	04/13/05	05/05/05	KWG0505825	
Benzo(k)fluoranthene	ND	U	10	2.9	1	04/13/05	05/05/05	KWG0505825	
Benzo(a)pyrene	ND	U	10	1.9	1	04/13/05	05/05/05	KWG0505825	
Indeno(1,2,3-cd)pyrene	**2.3**	J	10	2.2	1	04/13/05	05/05/05	KWG0505825	
Dibenz(a,h)anthracene	ND	U	10	2.5	1	04/13/05	05/05/05	KWG0505825	
Benzo(g,h,i)perylene	**3.9**	J	10	2.7	1	04/13/05	05/05/05	KWG0505825	

Comments:

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R3-SB02-0-0.5
Lab Code: K2502505-005

Units: ug/Kg
Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	48	11-87	05/05/05	Acceptable
Phenol-d6	58	20-99	05/05/05	Acceptable
Nitrobenzene-d5	55	10-99	05/05/05	Acceptable
2-Fluorobiphenyl	65	10-104	05/05/05	Acceptable
2,4,6-Tribromophenol	80	23-113	05/05/05	Acceptable
Terphenyl-d14	111	39-124	05/05/05	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

5/9/05

Client:	Battelle Memorial Institute	**Service Request:**	K2502505
Project:	Novato Ballfields/G486063	**Date Collected:**	04/06/2005
Sample Matrix:	Soil	**Date Received:**	04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	TO63-R3-SB03-0-0.5	**Units:**	ug/Kg
Lab Code:	K2502505-006	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	10	5.9	1	04/13/05	05/05/05	KWG0505825	
Phenol	**2.4**	J	30	2.3	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethyl) Ether	ND	U	10	2.9	1	04/13/05	05/05/05	KWG0505825	
2-Chlorophenol	ND	U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
2-Methylphenol	ND	U	10	4.1	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroisopropyl) Ether	ND	U	10	1.5	1	04/13/05	05/05/05	KWG0505825	
Acetophenone	ND	U	50	15	1	04/13/05	05/05/05	KWG0505825	
4-Methylphenol†	ND	U	10	3.5	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodi-n-propylamine	ND	U	10	3.9	1	04/13/05	05/05/05	KWG0505825	
Hexachloroethane	ND	U	10	2.7	1	04/13/05	05/05/05	KWG0505825	
Nitrobenzene	ND	U	10	2.4	1	04/13/05	05/05/05	KWG0505825	
Isophorone	ND	U	10	2.0	1	04/13/05	05/05/05	KWG0505825	
2-Nitrophenol	ND	U	10	3.2	1	04/13/05	05/05/05	KWG0505825	
2,4-Dimethylphenol	ND	U	50	6.6	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethoxy)methane	ND	U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
2,4-Dichlorophenol	ND	U	10	2.2	1	04/13/05	05/05/05	KWG0505825	
Naphthalene	**2.5**	J	10	1.6	1	04/13/05	05/05/05	KWG0505825	
4-Chloroaniline	ND	U	10	2.6	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobutadiene	ND	U	10	1.7	1	04/13/05	05/05/05	KWG0505825	
Caprolactam	ND	U	20	15	1	04/13/05	05/05/05	KWG0505825	
Benzaldehyde	ND	U	20	11	1	04/13/05	05/05/05	KWG0505825	
4-Chloro-3-methylphenol	ND	U	10	2.6	1	04/13/05	05/05/05	KWG0505825	
2-Methylnaphthalene	**4.4**	J	10	1.5	1	04/13/05	05/05/05	KWG0505825	
Hexachlorocyclopentadiene	ND	U	50	18	1	04/13/05	05/05/05	KWG0505825	
2,4,6-Trichlorophenol	ND	U	10	2.2	1	04/13/05	05/05/05	KWG0505825	
2,4,5-Trichlorophenol	ND	U	10	3.6	1	04/13/05	05/05/05	KWG0505825	
Biphenyl	ND	U	20	5.8	1	04/13/05	05/05/05	KWG0505825	
2-Chloronaphthalene	ND	U	10	4.3	1	04/13/05	05/05/05	KWG0505825	
2-Nitroaniline	ND	U	20	3.3	1	04/13/05	05/05/05	KWG0505825	
Dimethyl Phthalate	ND	U	10	2.2	1	04/13/05	05/05/05	KWG0505825	
2,6-Dinitrotoluene	ND	U	10	3.4	1	04/13/05	05/05/05	KWG0505825	
Acenaphthylene	ND	U	10	1.7	1	04/13/05	05/05/05	KWG0505825	
3-Nitroaniline	ND	U	20	3.2	1	04/13/05	05/05/05	KWG0505825	

Comments:

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R3-SB03-0-0.5
Lab Code: K2502505-006

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U	10	1.2	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrophenol	ND	U	200	43	1	04/13/05	05/05/05	KWG0505825	
4-Nitrophenol	ND	U	100	36	1	04/13/05	05/05/05	KWG0505825	
Dibenzofuran	ND	U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrotoluene	ND	U	10	3.4	1	04/13/05	05/05/05	KWG0505825	
Diethyl Phthalate	ND	U	10	4.2	1	04/13/05	05/05/05	KWG0505825	
Fluorene	ND	U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
4-Chlorophenyl Phenyl Ether	ND	U	10	2.4	1	04/13/05	05/05/05	KWG0505825	
4-Nitroaniline	ND	U	20	4.1	1	04/13/05	05/05/05	KWG0505825	
2-Methyl-4,6-dinitrophenol	ND	U UJ	100	2.1	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodiphenylamine	ND	U	10	2.7	1	04/13/05	05/05/05	KWG0505825	
4-Bromophenyl Phenyl Ether	ND	U	10	1.7	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobenzene	ND	U	10	2.6	1	04/13/05	05/05/05	KWG0505825	
Atrazine	ND	U	10	2.7	1	04/13/05	05/05/05	KWG0505825	
Pentachlorophenol	ND	U	100	11	1	04/13/05	05/05/05	KWG0505825	
Phenanthrene	**7.1**	J	10	1.6	1	04/13/05	05/05/05	KWG0505825	
Anthracene	**2.2**	J	10	1.7	1	04/13/05	05/05/05	KWG0505825	
Carbazole	ND	U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
Di-n-butyl Phthalate	**15**	U	10	3.2	1	04/13/05	05/05/05	KWG0505825	
Fluoranthene	**6.6**	J	10	2.7	1	04/13/05	05/05/05	KWG0505825	
Pyrene	**6.5**	J	10	1.6	1	04/13/05	05/05/05	KWG0505825	
Butyl Benzyl Phthalate	ND	U	10	1.8	1	04/13/05	05/05/05	KWG0505825	
3,3'-Dichlorobenzidine	ND	U UJ	100	4.5	1	04/13/05	05/05/05	KWG0505825	
Benz(a)anthracene	**3.0**	J	10	1.7	1	04/13/05	05/05/05	KWG0505825	
Chrysene	**7.2**	J	10	1.7	1	04/13/05	05/05/05	KWG0505825	
Bis(2-ethylhexyl) Phthalate	**370**		200	2.1	1	04/13/05	05/05/05	KWG0505825	
Di-n-octyl Phthalate	ND	U	10	1.5	1	04/13/05	05/05/05	KWG0505825	
Benzo(b)fluoranthene	**8.0**	J	10	3.0	1	04/13/05	05/05/05	KWG0505825	
Benzo(k)fluoranthene	ND	U	10	3.0	1	04/13/05	05/05/05	KWG0505825	
Benzo(a)pyrene	**8.5**	J	10	2.0	1	04/13/05	05/05/05	KWG0505825	
Indeno(1,2,3-cd)pyrene	**7.3**	J	10	2.3	1	04/13/05	05/05/05	KWG0505825	
Dibenz(a,h)anthracene	ND	U	10	2.7	1	04/13/05	05/05/05	KWG0505825	
Benzo(g,h,i)perylene	**11**		10	2.8	1	04/13/05	05/05/05	KWG0505825	

Comments:

6/19/05

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R3-SB03-0-0.5
Lab Code: K2502505-006

Units: ug/Kg
Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	41	11-87	05/05/05	Acceptable
Phenol-d6	52	20-99	05/05/05	Acceptable
Nitrobenzene-d5	53	10-99	05/05/05	Acceptable
2-Fluorobiphenyl	67	10-104	05/05/05	Acceptable
2,4,6-Tribromophenol	77	23-113	05/05/05	Acceptable
Terphenyl-d14	112	39-124	05/05/05	Acceptable

† **Analyte Comments**

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

6/19/05

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R4-SB03-0-0.5
Lab Code: K2502505-007

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	50	27	5	04/13/05	05/03/05	KWG0505825	
Phenol	ND	U	150	11	5	04/13/05	05/03/05	KWG0505825	
Bis(2-chloroethyl) Ether	ND	U	50	13	5	04/13/05	05/03/05	KWG0505825	
2-Chlorophenol	ND	U	50	9.2	5	04/13/05	05/03/05	KWG0505825	
2-Methylphenol	ND	U	50	19	5	04/13/05	05/03/05	KWG0505825	
Bis(2-chloroisopropyl) Ether	ND	U	50	6.5	5	04/13/05	05/03/05	KWG0505825	
Acetophenone	ND	U	250	65	5	04/13/05	05/03/05	KWG0505825	
4-Methylphenol†	ND	U	50	16	5	04/13/05	05/03/05	KWG0505825	
N-Nitrosodi-n-propylamine	ND	U	50	18	5	04/13/05	05/03/05	KWG0505825	
Hexachloroethane	ND	U	50	12	5	04/13/05	05/03/05	KWG0505825	
Nitrobenzene	ND	U	50	11	5	04/13/05	05/03/05	KWG0505825	
Isophorone	ND	U	50	8.7	5	04/13/05	05/03/05	KWG0505825	
2-Nitrophenol	ND	U	50	15	5	04/13/05	05/03/05	KWG0505825	
2,4-Dimethylphenol	ND	U	250	30	5	04/13/05	05/03/05	KWG0505825	
Bis(2-chloroethoxy)methane	ND	U	50	7.1	5	04/13/05	05/03/05	KWG0505825	
2,4-Dichlorophenol	ND	U	50	9.8	5	04/13/05	05/03/05	KWG0505825	
Naphthalene	ND	U	50	7.1	5	04/13/05	05/03/05	KWG0505825	
4-Chloroaniline	ND	U	50	12	5	04/13/05	05/03/05	KWG0505825	
Hexachlorobutadiene	ND	U	50	7.6	5	04/13/05	05/03/05	KWG0505825	
Caprolactam	ND	U	100	65	5	04/13/05	05/03/05	KWG0505825	
Benzaldehyde	ND	U	100	48	5	04/13/05	05/03/05	KWG0505825	
4-Chloro-3-methylphenol	ND	U	50	12	5	04/13/05	05/03/05	KWG0505825	
2-Methylnaphthalene	ND	U	50	6.5	5	04/13/05	05/03/05	KWG0505825	
Hexachlorocyclopentadiene	ND	U UJ	250	81	5	04/13/05	05/03/05	KWG0505825	
2,4,6-Trichlorophenol	ND	U	50	9.8	5	04/13/05	05/03/05	KWG0505825	
2,4,5-Trichlorophenol	ND	U	50	17	5	04/13/05	05/03/05	KWG0505825	
Biphenyl	ND	U	100	26	5	04/13/05	05/03/05	KWG0505825	
2-Chloronaphthalene	ND	U	50	20	5	04/13/05	05/03/05	KWG0505825	
2-Nitroaniline	ND	U UJ	100	15	5	04/13/05	05/03/05	KWG0505825	
Dimethyl Phthalate	ND	U	50	9.8	5	04/13/05	05/03/05	KWG0505825	
2,6-Dinitrotoluene	ND	U	50	16	5	04/13/05	05/03/05	KWG0505825	
Acenaphthylene	ND	U	50	7.6	5	04/13/05	05/03/05	KWG0505825	
3-Nitroaniline	ND	U	100	15	5	04/13/05	05/03/05	KWG0505825	

Comments:

5/11/05

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R4-SB03-0-0.5
Lab Code: K2502505-007

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q		MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U		50	5.4	5	04/13/05	05/03/05	KWG0505825	
2,4-Dinitrophenol	ND	U		1000	200	5	04/13/05	05/03/05	KWG0505825	
4-Nitrophenol	ND	U		500	170	5	04/13/05	05/03/05	KWG0505825	
Dibenzofuran	ND	U		50	7.1	5	04/13/05	05/03/05	KWG0505825	
2,4-Dinitrotoluene	ND	U		50	16	5	04/13/05	05/03/05	KWG0505825	
Diethyl Phthalate	ND	U		50	19	5	04/13/05	05/03/05	KWG0505825	
Fluorene	ND	U		50	9.2	5	04/13/05	05/03/05	KWG0505825	
4-Chlorophenyl Phenyl Ether	ND	U		50	11	5	04/13/05	05/03/05	KWG0505825	
4-Nitroaniline	ND	U		100	19	5	04/13/05	05/03/05	KWG0505825	
2-Methyl-4,6-dinitrophenol	ND	U	UJ	500	9.2	5	04/13/05	05/03/05	KWG0505825	
N-Nitrosodiphenylamine	ND	U		50	12	5	04/13/05	05/03/05	KWG0505825	
4-Bromophenyl Phenyl Ether	ND	U		50	7.6	5	04/13/05	05/03/05	KWG0505825	
Hexachlorobenzene	ND	U		50	12	5	04/13/05	05/03/05	KWG0505825	
Atrazine	ND	U		50	12	5	04/13/05	05/03/05	KWG0505825	
Pentachlorophenol	ND	U		500	46	5	04/13/05	05/03/05	KWG0505825	
Phenanthrene	ND	U		50	7.1	5	04/13/05	05/03/05	KWG0505825	
Anthracene	ND	U		50	7.6	5	04/13/05	05/03/05	KWG0505825	
Carbazole	ND	U		50	7.1	5	04/13/05	05/03/05	KWG0505825	
Di-n-butyl Phthalate	**31**	JD	50U	50	15	5	04/13/05	05/03/05	KWG0505825	
Fluoranthene	ND	U		50	12	5	04/13/05	05/03/05	KWG0505825	
Pyrene	**9.4**	JD		50	7.1	5	04/13/05	05/03/05	KWG0505825	
Butyl Benzyl Phthalate	ND	U		50	8.1	5	04/13/05	05/03/05	KWG0505825	
3,3'-Dichlorobenzidine	ND	U	UJ	500	20	5	04/13/05	05/03/05	KWG0505825	
Benz(a)anthracene	ND	U		50	7.6	5	04/13/05	05/03/05	KWG0505825	
Chrysene	ND	U		50	7.6	5	04/13/05	05/03/05	KWG0505825	
Bis(2-ethylhexyl) Phthalate	**58**	JD	1000U	1000	9.2	5	04/13/05	05/03/05	KWG0505825	
Di-n-octyl Phthalate	ND	U		50	6.5	5	04/13/05	05/03/05	KWG0505825	
Benzo(b)fluoranthene	ND	U		50	14	5	04/13/05	05/03/05	KWG0505825	
Benzo(k)fluoranthene	ND	U		50	14	5	04/13/05	05/03/05	KWG0505825	
Benzo(a)pyrene	ND	U		50	8.7	5	04/13/05	05/03/05	KWG0505825	
Indeno(1,2,3-cd)pyrene	ND	U		50	11	5	04/13/05	05/03/05	KWG0505825	
Dibenz(a,h)anthracene	ND	U		50	12	5	04/13/05	05/03/05	KWG0505825	
Benzo(g,h,i)perylene	ND	U		50	13	5	04/13/05	05/03/05	KWG0505825	

Comments:

6/19/05

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R4-SB03-0-0.5
Lab Code: K2502505-007

Units: ug/Kg
Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	58	11-87	05/03/05	Acceptable
Phenol-d6	69	20-99	05/03/05	Acceptable
Nitrobenzene-d5	72	10-99	05/03/05	Acceptable
2-Fluorobiphenyl	77	10-104	05/03/05	Acceptable
2,4,6-Tribromophenol	77	23-113	05/03/05	Acceptable
Terphenyl-d14	96	39-124	05/03/05	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

6/9/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R4-SB03-3-4
Lab Code: K2502505-008

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	10	7.7	1	04/13/05	05/05/05	KWG0505825	
Phenol	ND	U	30	3.0	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethyl) Ether	ND	U	10	3.8	1	04/13/05	05/05/05	KWG0505825	
2-Chlorophenol	ND	U	10	2.7	1	04/13/05	05/05/05	KWG0505825	
2-Methylphenol	ND	U	10	5.4	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroisopropyl) Ether	ND	U	10	1.9	1	04/13/05	05/05/05	KWG0505825	
Acetophenone	ND	U	50	19	1	04/13/05	05/05/05	KWG0505825	
4-Methylphenol†	ND	U	10	4.6	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodi-n-propylamine	ND	U	10	5.0	1	04/13/05	05/05/05	KWG0505825	
Hexachloroethane	ND	U	10	3.5	1	04/13/05	05/05/05	KWG0505825	
Nitrobenzene	ND	U	10	3.2	1	04/13/05	05/05/05	KWG0505825	
Isophorone	ND	U	10	2.5	1	04/13/05	05/05/05	KWG0505825	
2-Nitrophenol	ND	U	10	4.1	1	04/13/05	05/05/05	KWG0505825	
2,4-Dimethylphenol	ND	U	50	8.6	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethoxy)methane	ND	U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
2,4-Dichlorophenol	ND	U	10	2.9	1	04/13/05	05/05/05	KWG0505825	
Naphthalene	ND	U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
4-Chloroaniline	ND	U	10	3.3	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobutadiene	ND	U	10	2.2	1	04/13/05	05/05/05	KWG0505825	
Caprolactam	ND	U	20	19	1	04/13/05	05/05/05	KWG0505825	
Benzaldehyde	**23**		20	14	1	04/13/05	05/05/05	KWG0505825	
4-Chloro-3-methylphenol	ND	U	10	3.3	1	04/13/05	05/05/05	KWG0505825	
2-Methylnaphthalene	ND	U	10	1.9	1	04/13/05	05/05/05	KWG0505825	
Hexachlorocyclopentadiene	ND	U	50	24	1	04/13/05	05/05/05	KWG0505825	
2,4,6-Trichlorophenol	ND	U	10	2.9	1	04/13/05	05/05/05	KWG0505825	
2,4,5-Trichlorophenol	ND	U	10	4.7	1	04/13/05	05/05/05	KWG0505825	
Biphenyl	ND	U	20	7.5	1	04/13/05	05/05/05	KWG0505825	
2-Chloronaphthalene	ND	U	10	5.7	1	04/13/05	05/05/05	KWG0505825	
2-Nitroaniline	ND	U	20	4.3	1	04/13/05	05/05/05	KWG0505825	
Dimethyl Phthalate	ND	U	10	2.9	1	04/13/05	05/05/05	KWG0505825	
2,6-Dinitrotoluene	ND	U	10	4.4	1	04/13/05	05/05/05	KWG0505825	
Acenaphthylene	ND	U	10	2.2	1	04/13/05	05/05/05	KWG0505825	
3-Nitroaniline	ND	U	20	4.1	1	04/13/05	05/05/05	KWG0505825	

Comments:

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R4-SB03-3-4
Lab Code: K2502505-008

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q		MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U		10	1.6	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrophenol	ND	U		200	57	1	04/13/05	05/05/05	KWG0505825	
4-Nitrophenol	ND	U		100	47	1	04/13/05	05/05/05	KWG0505825	
Dibenzofuran	ND	U		10	2.1	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrotoluene	ND	U		10	4.4	1	04/13/05	05/05/05	KWG0505825	
Diethyl Phthalate	ND	U		10	5.5	1	04/13/05	05/05/05	KWG0505825	
Fluorene	ND	U		10	2.7	1	04/13/05	05/05/05	KWG0505825	
4-Chlorophenyl Phenyl Ether	ND	U		10	3.2	1	04/13/05	05/05/05	KWG0505825	
4-Nitroaniline	ND	U		20	5.4	1	04/13/05	05/05/05	KWG0505825	
2-Methyl-4,6-dinitrophenol	ND	U	UJ	100	2.7	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodiphenylamine	ND	U		10	3.5	1	04/13/05	05/05/05	KWG0505825	
4-Bromophenyl Phenyl Ether	ND	U		10	2.2	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobenzene	ND	U		10	3.3	1	04/13/05	05/05/05	KWG0505825	
Atrazine	ND	U		10	3.5	1	04/13/05	05/05/05	KWG0505825	
Pentachlorophenol	ND	U		100	14	1	04/13/05	05/05/05	KWG0505825	
Phenanthrene	ND	U		10	2.1	1	04/13/05	05/05/05	KWG0505825	
Anthracene	ND	U		10	2.2	1	04/13/05	05/05/05	KWG0505825	
Carbazole	ND	U		10	2.1	1	04/13/05	05/05/05	KWG0505825	
Di-n-butyl Phthalate	**13**		U	10	4.1	1	04/13/05	05/05/05	KWG0505825	
Fluoranthene	ND	U		10	3.5	1	04/13/05	05/05/05	KWG0505825	
Pyrene	ND	U		10	2.1	1	04/13/05	05/05/05	KWG0505825	
Butyl Benzyl Phthalate	ND	U		10	2.4	1	04/13/05	05/05/05	KWG0505825	
3,3'-Dichlorobenzidine	ND	U	UJ	100	5.8	1	04/13/05	05/05/05	KWG0505825	
Benz(a)anthracene	ND	U		10	2.2	1	04/13/05	05/05/05	KWG0505825	
Chrysene	ND	U		10	2.2	1	04/13/05	05/05/05	KWG0505825	
Bis(2-ethylhexyl) Phthalate	**23**	J	200U	200	2.7	1	04/13/05	05/05/05	KWG0505825	
Di-n-octyl Phthalate	ND	U		10	1.9	1	04/13/05	05/05/05	KWG0505825	
Benzo(b)fluoranthene	ND	U		10	4.0	1	04/13/05	05/05/05	KWG0505825	
Benzo(k)fluoranthene	ND	U		10	4.0	1	04/13/05	05/05/05	KWG0505825	
Benzo(a)pyrene	ND	U		10	2.5	1	04/13/05	05/05/05	KWG0505825	
Indeno(1,2,3-cd)pyrene	ND	U		10	3.0	1	04/13/05	05/05/05	KWG0505825	
Dibenz(a,h)anthracene	ND	U		10	3.5	1	04/13/05	05/05/05	KWG0505825	
Benzo(g,h,i)perylene	ND	U		10	3.6	1	04/13/05	05/05/05	KWG0505825	

Comments:

6/19/05

Client:	Battelle Memorial Institute	**Service Request:**	K2502505
Project:	Novato Ballfields/G486063	**Date Collected:**	04/06/2005
Sample Matrix:	Soil	**Date Received:**	04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	TO63-R4-SB03-3-4	**Units:**	ug/Kg
Lab Code:	K2502505-008	**Basis:**	Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	51	11-87	05/05/05	Acceptable
Phenol-d6	60	20-99	05/05/05	Acceptable
Nitrobenzene-d5	49	10-99	05/05/05	Acceptable
2-Fluorobiphenyl	59	10-104	05/05/05	Acceptable
2,4,6-Tribromophenol	86	23-113	05/05/05	Acceptable
Terphenyl-d14	106	39-124	05/05/05	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R4-SB02-0-0.5
Lab Code: K2502505-009

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	9.9	5.5	1	04/13/05	05/05/05	KWG0505825	
Phenol	ND	U	30	2.2	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethyl) Ether	ND	U	9.9	2.7	1	04/13/05	05/05/05	KWG0505825	
2-Chlorophenol	ND	U	9.9	1.9	1	04/13/05	05/05/05	KWG0505825	
2-Methylphenol	ND	U	9.9	3.8	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroisopropyl) Ether	ND	U	9.9	1.4	1	04/13/05	05/05/05	KWG0505825	
Acetophenone	ND	U	50	14	1	04/13/05	05/05/05	KWG0505825	
4-Methylphenol†	ND	U	9.9	3.3	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodi-n-propylamine	ND	U	9.9	3.6	1	04/13/05	05/05/05	KWG0505825	
Hexachloroethane	ND	U	9.9	2.5	1	04/13/05	05/05/05	KWG0505825	
Nitrobenzene	ND	U	9.9	2.3	1	04/13/05	05/05/05	KWG0505825	
Isophorone	ND	U	9.9	1.8	1	04/13/05	05/05/05	KWG0505825	
2-Nitrophenol	ND	U	9.9	2.9	1	04/13/05	05/05/05	KWG0505825	
2,4-Dimethylphenol	ND	U	50	6.2	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethoxy)methane	ND	U	9.9	1.5	1	04/13/05	05/05/05	KWG0505825	
2,4-Dichlorophenol	ND	U	9.9	2.0	1	04/13/05	05/05/05	KWG0505825	
Naphthalene	ND	U	9.9	1.5	1	04/13/05	05/05/05	KWG0505825	
4-Chloroaniline	ND	U	9.9	2.4	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobutadiene	ND	U	9.9	1.6	1	04/13/05	05/05/05	KWG0505825	
Caprolactam	ND	U	20	14	1	04/13/05	05/05/05	KWG0505825	
Benzaldehyde	ND	U	20	9.8	1	04/13/05	05/05/05	KWG0505825	
4-Chloro-3-methylphenol	ND	U	9.9	2.4	1	04/13/05	05/05/05	KWG0505825	
2-Methylnaphthalene	ND	U	9.9	1.4	1	04/13/05	05/05/05	KWG0505825	
Hexachlorocyclopentadiene	ND	U	50	17	1	04/13/05	05/05/05	KWG0505825	
2,4,6-Trichlorophenol	ND	U	9.9	2.0	1	04/13/05	05/05/05	KWG0505825	
2,4,5-Trichlorophenol	ND	U	9.9	3.4	1	04/13/05	05/05/05	KWG0505825	
Biphenyl	ND	U	20	5.4	1	04/13/05	05/05/05	KWG0505825	
2-Chloronaphthalene	ND	U	9.9	4.0	1	04/13/05	05/05/05	KWG0505825	
2-Nitroaniline	ND	U	20	3.0	1	04/13/05	05/05/05	KWG0505825	
Dimethyl Phthalate	ND	U	9.9	2.0	1	04/13/05	05/05/05	KWG0505825	
2,6-Dinitrotoluene	ND	U	9.9	3.2	1	04/13/05	05/05/05	KWG0505825	
Acenaphthylene	**3.2**	J	9.9	1.6	1	04/13/05	05/05/05	KWG0505825	
3-Nitroaniline	ND	U	20	2.9	1	04/13/05	05/05/05	KWG0505825	

Comments:

6/19/05

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R4-SB02-0-0.5
Lab Code: K2502505-009

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U	9.9	1.2	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrophenol	ND	U	200	40	1	04/13/05	05/05/05	KWG0505825	
4-Nitrophenol	ND	U	99	34	1	04/13/05	05/05/05	KWG0505825	
Dibenzofuran	ND	U	9.9	1.5	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrotoluene	ND	U	9.9	3.2	1	04/13/05	05/05/05	KWG0505825	
Diethyl Phthalate	ND	U	9.9	3.9	1	04/13/05	05/05/05	KWG0505825	
Fluorene	ND	U	9.9	1.9	1	04/13/05	05/05/05	KWG0505825	
4-Chlorophenyl Phenyl Ether	ND	U	9.9	2.3	1	04/13/05	05/05/05	KWG0505825	
4-Nitroaniline	ND	U	20	3.8	1	04/13/05	05/05/05	KWG0505825	
2-Methyl-4,6-dinitrophenol	ND	U UJ	99	1.9	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodiphenylamine	ND	U	9.9	2.5	1	04/13/05	05/05/05	KWG0505825	
4-Bromophenyl Phenyl Ether	ND	U	9.9	1.6	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobenzene	ND	U	9.9	2.4	1	04/13/05	05/05/05	KWG0505825	
Atrazine	ND	U	9.9	2.5	1	04/13/05	05/05/05	KWG0505825	
Pentachlorophenol	ND	U	99	9.5	1	04/13/05	05/05/05	KWG0505825	
Phenanthrene	**7.2**	J	9.9	1.5	1	04/13/05	05/05/05	KWG0505825	
Anthracene	**2.7**	J	9.9	1.6	1	04/13/05	05/05/05	KWG0505825	
Carbazole	**2.3**	J	9.9	1.5	1	04/13/05	05/05/05	KWG0505825	
Di-n-butyl Phthalate	**27**	u	9.9	2.9	1	04/13/05	05/05/05	KWG0505825	
Fluoranthene	**22**		9.9	2.5	1	04/13/05	05/05/05	KWG0505825	
Pyrene	**18**		9.9	1.5	1	04/13/05	05/05/05	KWG0505825	
Butyl Benzyl Phthalate	**3.7**	J	9.9	1.7	1	04/13/05	05/05/05	KWG0505825	
3,3'-Dichlorobenzidine	ND	U UJ	99	4.2	1	04/13/05	05/05/05	KWG0505825	
Benz(a)anthracene	**9.8**	J	9.9	1.6	1	04/13/05	05/05/05	KWG0505825	
Chrysene	**18**		9.9	1.6	1	04/13/05	05/05/05	KWG0505825	
Bis(2-ethylhexyl) Phthalate	**69**	J 200U	200	1.9	1	04/13/05	05/05/05	KWG0505825	
Di-n-octyl Phthalate	ND	U	9.9	1.4	1	04/13/05	05/05/05	KWG0505825	
Benzo(b)fluoranthene	**26**		9.9	2.8	1	04/13/05	05/05/05	KWG0505825	
Benzo(k)fluoranthene	**8.5**	J	9.9	2.8	1	04/13/05	05/05/05	KWG0505825	
Benzo(a)pyrene	**16**		9.9	1.8	1	04/13/05	05/05/05	KWG0505825	
Indeno(1,2,3-cd)pyrene	**20**		9.9	2.2	1	04/13/05	05/05/05	KWG0505825	
Dibenz(a,h)anthracene	**4.0**	J	9.9	2.5	1	04/13/05	05/05/05	KWG0505825	
Benzo(g,h,i)perylene	**22**		9.9	2.6	1	04/13/05	05/05/05	KWG0505825	

Comments:

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R4-SB02-0-0.5
Lab Code: K2502505-009

Units: ug/Kg
Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	42	11-87	05/05/05	Acceptable
Phenol-d6	53	20-99	05/05/05	Acceptable
Nitrobenzene-d5	52	10-99	05/05/05	Acceptable
2-Fluorobiphenyl	65	10-104	05/05/05	Acceptable
2,4,6-Tribromophenol	72	23-113	05/05/05	Acceptable
Terphenyl-d14	104	39-124	05/05/05	Acceptable

† **Analyte Comments**

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

6/9/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R4-SB01-0-0.5
Lab Code: K2502505-010

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	10	5.3	1	04/13/05	05/05/05	KWG0505825	
Phenol	ND	U	30	2.1	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethyl) Ether	ND	U	10	2.6	1	04/13/05	05/05/05	KWG0505825	
2-Chlorophenol	ND	U	10	1.9	1	04/13/05	05/05/05	KWG0505825	
2-Methylphenol	ND	U	10	3.7	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroisopropyl) Ether	ND	U	10	1.3	1	04/13/05	05/05/05	KWG0505825	
Acetophenone	ND	U	50	13	1	04/13/05	05/05/05	KWG0505825	
4-Methylphenol†	ND	U	10	3.2	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodi-n-propylamine	ND	U	10	3.5	1	04/13/05	05/05/05	KWG0505825	
Hexachloroethane	ND	U	10	2.4	1	04/13/05	05/05/05	KWG0505825	
Nitrobenzene	ND	U	10	2.2	1	04/13/05	05/05/05	KWG0505825	
Isophorone	ND	U	10	1.8	1	04/13/05	05/05/05	KWG0505825	
2-Nitrophenol	ND	U	10	2.9	1	04/13/05	05/05/05	KWG0505825	
2,4-Dimethylphenol	ND	U	50	6.0	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethoxy)methane	ND	U	10	1.5	1	04/13/05	05/05/05	KWG0505825	
2,4-Dichlorophenol	ND	U	10	2.0	1	04/13/05	05/05/05	KWG0505825	
Naphthalene	ND	U	10	1.5	1	04/13/05	05/05/05	KWG0505825	
4-Chloroaniline	ND	U	10	2.3	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobutadiene	ND	U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
Caprolactam	ND	U	20	13	1	04/13/05	05/05/05	KWG0505825	
Benzaldehyde	ND	U	20	9.6	1	04/13/05	05/05/05	KWG0505825	
4-Chloro-3-methylphenol	ND	U	10	2.3	1	04/13/05	05/05/05	KWG0505825	
2-Methylnaphthalene	ND	U	10	1.3	1	04/13/05	05/05/05	KWG0505825	
Hexachlorocyclopentadiene	ND	U	50	17	1	04/13/05	05/05/05	KWG0505825	
2,4,6-Trichlorophenol	ND	U	10	2.0	1	04/13/05	05/05/05	KWG0505825	
2,4,5-Trichlorophenol	ND	U	10	3.3	1	04/13/05	05/05/05	KWG0505825	
Biphenyl	ND	U	20	5.2	1	04/13/05	05/05/05	KWG0505825	
2-Chloronaphthalene	ND	U	10	3.9	1	04/13/05	05/05/05	KWG0505825	
2-Nitroaniline	ND	U	20	3.0	1	04/13/05	05/05/05	KWG0505825	
Dimethyl Phthalate	ND	U	10	2.0	1	04/13/05	05/05/05	KWG0505825	
2,6-Dinitrotoluene	ND	U	10	3.1	1	04/13/05	05/05/05	KWG0505825	
Acenaphthylene	ND	U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
3-Nitroaniline	ND	U	20	2.9	1	04/13/05	05/05/05	KWG0505825	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R4-SB01-0-0.5
Lab Code: K2502505-010

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U	10	1.1	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrophenol	ND	U	200	39	1	04/13/05	05/05/05	KWG0505825	
4-Nitrophenol	ND	U	100	33	1	04/13/05	05/05/05	KWG0505825	
Dibenzofuran	ND	U	10	1.5	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrotoluene	ND	U	10	3.1	1	04/13/05	05/05/05	KWG0505825	
Diethyl Phthalate	ND	U	10	3.8	1	04/13/05	05/05/05	KWG0505825	
Fluorene	ND	U	10	1.9	1	04/13/05	05/05/05	KWG0505825	
4-Chlorophenyl Phenyl Ether	ND	U	10	2.2	1	04/13/05	05/05/05	KWG0505825	
4-Nitroaniline	ND	U	20	3.7	1	04/13/05	05/05/05	KWG0505825	
2-Methyl-4,6-dinitrophenol	ND	U UJ	100	1.9	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodiphenylamine	ND	U	10	2.4	1	04/13/05	05/05/05	KWG0505825	
4-Bromophenyl Phenyl Ether	ND	U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobenzene	ND	U	10	2.3	1	04/13/05	05/05/05	KWG0505825	
Atrazine	ND	U	10	2.4	1	04/13/05	05/05/05	KWG0505825	
Pentachlorophenol	ND	U	100	9.2	1	04/13/05	05/05/05	KWG0505825	
Phenanthrene	**1.5**	J	10	1.5	1	04/13/05	05/05/05	KWG0505825	
Anthracene	ND	U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
Carbazole	ND	U	10	1.5	1	04/13/05	05/05/05	KWG0505825	
Di-n-butyl Phthalate	**17**	U	10	2.9	1	04/13/05	05/05/05	KWG0505825	
Fluoranthene	ND	U	10	2.4	1	04/13/05	05/05/05	KWG0505825	
Pyrene	**1.9**	J	10	1.5	1	04/13/05	05/05/05	KWG0505825	
Butyl Benzyl Phthalate	ND	U	10	1.7	1	04/13/05	05/05/05	KWG0505825	
3,3'-Dichlorobenzidine	ND	U UJ	100	4.0	1	04/13/05	05/05/05	KWG0505825	
Benz(a)anthracene	ND	U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
Chrysene	ND	U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
Bis(2-ethylhexyl) Phthalate	**18**	J 200U	200	1.9	1	04/13/05	05/05/05	KWG0505825	
Di-n-octyl Phthalate	ND	U	10	1.3	1	04/13/05	05/05/05	KWG0505825	
Benzo(b)fluoranthene	ND	U	10	2.8	1	04/13/05	05/05/05	KWG0505825	
Benzo(k)fluoranthene	ND	U	10	2.8	1	04/13/05	05/05/05	KWG0505825	
Benzo(a)pyrene	ND	U	10	1.8	1	04/13/05	05/05/05	KWG0505825	
Indeno(1,2,3-cd)pyrene	ND	U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
Dibenz(a,h)anthracene	ND	U	10	2.4	1	04/13/05	05/05/05	KWG0505825	
Benzo(g,h,i)perylene	ND	U	10	2.5	1	04/13/05	05/05/05	KWG0505825	

Comments:

6/14/05

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R4-SB01-0-0.5
Lab Code: K2502505-010

Units: ug/Kg
Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	51	11-87	05/05/05	Acceptable
Phenol-d6	62	20-99	05/05/05	Acceptable
Nitrobenzene-d5	54	10-99	05/05/05	Acceptable
2-Fluorobiphenyl	65	10-104	05/05/05	Acceptable
2,4,6-Tribromophenol	74	23-113	05/05/05	Acceptable
Terphenyl-d14	104	39-124	05/05/05	Acceptable

† **Analyte Comments**

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

6/19/05

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/05/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-SPN-SB03-4-5
Lab Code: K2502505-011

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	10	7.7	1	04/13/05	05/05/05	KWG0505825	
Phenol	ND	U	30	3.0	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethyl) Ether	ND	U	10	3.8	1	04/13/05	05/05/05	KWG0505825	
2-Chlorophenol	ND	U	10	2.7	1	04/13/05	05/05/05	KWG0505825	
2-Methylphenol	ND	U	10	5.4	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroisopropyl) Ether	ND	U	10	1.9	1	04/13/05	05/05/05	KWG0505825	
Acetophenone	ND	U	50	19	1	04/13/05	05/05/05	KWG0505825	
4-Methylphenol†	ND	U	10	4.6	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodi-n-propylamine	ND	U	10	5.0	1	04/13/05	05/05/05	KWG0505825	
Hexachloroethane	ND	U	10	3.5	1	04/13/05	05/05/05	KWG0505825	
Nitrobenzene	ND	U	10	3.2	1	04/13/05	05/05/05	KWG0505825	
Isophorone	ND	U	10	2.5	1	04/13/05	05/05/05	KWG0505825	
2-Nitrophenol	ND	U	10	4.1	1	04/13/05	05/05/05	KWG0505825	
2,4-Dimethylphenol	ND	U	50	8.6	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethoxy)methane	ND	U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
2,4-Dichlorophenol	ND	U	10	2.9	1	04/13/05	05/05/05	KWG0505825	
Naphthalene	ND	U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
4-Chloroaniline	ND	U	10	3.3	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobutadiene	ND	U	10	2.2	1	04/13/05	05/05/05	KWG0505825	
Caprolactam	ND	U	20	19	1	04/13/05	05/05/05	KWG0505825	
Benzaldehyde	ND	U	20	14	1	04/13/05	05/05/05	KWG0505825	
4-Chloro-3-methylphenol	ND	U	10	3.3	1	04/13/05	05/05/05	KWG0505825	
2-Methylnaphthalene	ND	U	10	1.9	1	04/13/05	05/05/05	KWG0505825	
Hexachlorocyclopentadiene	ND	U	50	24	1	04/13/05	05/05/05	KWG0505825	
2,4,6-Trichlorophenol	ND	U	10	2.9	1	04/13/05	05/05/05	KWG0505825	
2,4,5-Trichlorophenol	ND	U	10	4.7	1	04/13/05	05/05/05	KWG0505825	
Biphenyl	ND	U	20	7.5	1	04/13/05	05/05/05	KWG0505825	
2-Chloronaphthalene	ND	U	10	5.7	1	04/13/05	05/05/05	KWG0505825	
2-Nitroaniline	ND	U	20	4.3	1	04/13/05	05/05/05	KWG0505825	
Dimethyl Phthalate	ND	U	10	2.9	1	04/13/05	05/05/05	KWG0505825	
2,6-Dinitrotoluene	ND	U	10	4.4	1	04/13/05	05/05/05	KWG0505825	
Acenaphthylene	ND	U	10	2.2	1	04/13/05	05/05/05	KWG0505825	
3-Nitroaniline	ND	U	20	4.1	1	04/13/05	05/05/05	KWG0505825	

Comments:

6/14/05

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/05/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-SPN-SB03-4-5
Lab Code: K2502505-011

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrophenol	ND	U	200	57	1	04/13/05	05/05/05	KWG0505825	
4-Nitrophenol	ND	U	100	47	1	04/13/05	05/05/05	KWG0505825	
Dibenzofuran	ND	U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrotoluene	ND	U	10	4.4	1	04/13/05	05/05/05	KWG0505825	
Diethyl Phthalate	ND	U	10	5.5	1	04/13/05	05/05/05	KWG0505825	
Fluorene	ND	U	10	2.7	1	04/13/05	05/05/05	KWG0505825	
4-Chlorophenyl Phenyl Ether	ND	U	10	3.2	1	04/13/05	05/05/05	KWG0505825	
4-Nitroaniline	ND	U	20	5.4	1	04/13/05	05/05/05	KWG0505825	
2-Methyl-4,6-dinitrophenol	ND	U UJ	100	2.7	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodiphenylamine	ND	U	10	3.5	1	04/13/05	05/05/05	KWG0505825	
4-Bromophenyl Phenyl Ether	ND	U	10	2.2	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobenzene	ND	U	10	3.3	1	04/13/05	05/05/05	KWG0505825	
Atrazine	ND	U	10	3.5	1	04/13/05	05/05/05	KWG0505825	
Pentachlorophenol	ND	U	100	14	1	04/13/05	05/05/05	KWG0505825	
Phenanthrene	ND	U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
Anthracene	ND	U	10	2.2	1	04/13/05	05/05/05	KWG0505825	
Carbazole	ND	U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
Di-n-butyl Phthalate	**35**	u	10	4.1	1	04/13/05	05/05/05	KWG0505825	
Fluoranthene	ND	U	10	3.5	1	04/13/05	05/05/05	KWG0505825	
Pyrene	ND	U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
Butyl Benzyl Phthalate	ND	U	10	2.4	1	04/13/05	05/05/05	KWG0505825	
3,3'-Dichlorobenzidine	ND	U UJ	100	5.8	1	04/13/05	05/05/05	KWG0505825	
Benz(a)anthracene	ND	U	10	2.2	1	04/13/05	05/05/05	KWG0505825	
Chrysene	ND	U	10	2.2	1	04/13/05	05/05/05	KWG0505825	
Bis(2-ethylhexyl) Phthalate	**17**	J 200U	200	2.7	1	04/13/05	05/05/05	KWG0505825	
Di-n-octyl Phthalate	ND	U	10	1.9	1	04/13/05	05/05/05	KWG0505825	
Benzo(b)fluoranthene	ND	U	10	4.0	1	04/13/05	05/05/05	KWG0505825	
Benzo(k)fluoranthene	ND	U	10	4.0	1	04/13/05	05/05/05	KWG0505825	
Benzo(a)pyrene	ND	U	10	2.5	1	04/13/05	05/05/05	KWG0505825	
Indeno(1,2,3-cd)pyrene	ND	U	10	3.0	1	04/13/05	05/05/05	KWG0505825	
Dibenz(a,h)anthracene	ND	U	10	3.5	1	04/13/05	05/05/05	KWG0505825	
Benzo(g,h,i)perylene	ND	U	10	3.6	1	04/13/05	05/05/05	KWG0505825	

Comments:

6/1a/05

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/05/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-SPN-SB03-4-5
Lab Code: K2502505-011

Units: ug/Kg
Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	53	11-87	05/05/05	Acceptable
Phenol-d6	64	20-99	05/05/05	Acceptable
Nitrobenzene-d5	51	10-99	05/05/05	Acceptable
2-Fluorobiphenyl	60	10-104	05/05/05	Acceptable
2,4,6-Tribromophenol	77	23-113	05/05/05	Acceptable
Terphenyl-d14	100	39-124	05/05/05	Acceptable

† **Analyte Comments**

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

4/19/05

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/05/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-SPN-SB01-0-0.5
Lab Code: K2502505-012

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	50	37	5	04/13/05	05/05/05	KWG0505825	
Phenol	ND	U	150	15	5	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethyl) Ether	ND	U	50	18	5	04/13/05	05/05/05	KWG0505825	
2-Chlorophenol	ND	U	50	13	5	04/13/05	05/05/05	KWG0505825	
2-Methylphenol	ND	U	50	26	5	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroisopropyl) Ether	ND	U	50	9.0	5	04/13/05	05/05/05	KWG0505825	
Acetophenone	ND	U	250	90	5	04/13/05	05/05/05	KWG0505825	
4-Methylphenol†	ND	U	50	22	5	04/13/05	05/05/05	KWG0505825	
N-Nitrosodi-n-propylamine	ND	U	50	24	5	04/13/05	05/05/05	KWG0505825	
Hexachloroethane	ND	U	50	17	5	04/13/05	05/05/05	KWG0505825	
Nitrobenzene	ND	U	50	15	5	04/13/05	05/05/05	KWG0505825	
Isophorone	ND	U	50	12	5	04/13/05	05/05/05	KWG0505825	
2-Nitrophenol	ND	U	50	20	5	04/13/05	05/05/05	KWG0505825	
2,4-Dimethylphenol	ND	U	250	41	5	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethoxy)methane	ND	U	50	9.7	5	04/13/05	05/05/05	KWG0505825	
2,4-Dichlorophenol	ND	U	50	14	5	04/13/05	05/05/05	KWG0505825	
Naphthalene	ND	U	50	9.7	5	04/13/05	05/05/05	KWG0505825	
4-Chloroaniline	ND	U	50	16	5	04/13/05	05/05/05	KWG0505825	
Hexachlorobutadiene	ND	U	50	11	5	04/13/05	05/05/05	KWG0505825	
Caprolactam	ND	U	100	90	5	04/13/05	05/05/05	KWG0505825	
Benzaldehyde	ND	U	100	66	5	04/13/05	05/05/05	KWG0505825	
4-Chloro-3-methylphenol	ND	U	50	16	5	04/13/05	05/05/05	KWG0505825	
2-Methylnaphthalene	ND	U	50	9.0	5	04/13/05	05/05/05	KWG0505825	
Hexachlorocyclopentadiene	ND	U	250	120	5	04/13/05	05/05/05	KWG0505825	
2,4,6-Trichlorophenol	ND	U	50	14	5	04/13/05	05/05/05	KWG0505825	
2,4,5-Trichlorophenol	ND	U	50	23	5	04/13/05	05/05/05	KWG0505825	
Biphenyl	ND	U	100	36	5	04/13/05	05/05/05	KWG0505825	
2-Chloronaphthalene	ND	U	50	27	5	04/13/05	05/05/05	KWG0505825	
2-Nitroaniline	ND	U	100	21	5	04/13/05	05/05/05	KWG0505825	
Dimethyl Phthalate	ND	U	50	14	5	04/13/05	05/05/05	KWG0505825	
2,6-Dinitrotoluene	ND	U	50	21	5	04/13/05	05/05/05	KWG0505825	
Acenaphthylene	ND	U	50	11	5	04/13/05	05/05/05	KWG0505825	
3-Nitroaniline	ND	U	100	20	5	04/13/05	05/05/05	KWG0505825	

Comments:

6/14/05

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/05/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-SPN-SB01-0-0.5
Lab Code: K2502505-012

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U	50	7.5	5	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrophenol	ND	U	1000	270	5	04/13/05	05/05/05	KWG0505825	
4-Nitrophenol	ND	U	500	230	5	04/13/05	05/05/05	KWG0505825	
Dibenzofuran	ND	U	50	9.7	5	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrotoluene	ND	U	50	21	5	04/13/05	05/05/05	KWG0505825	
Diethyl Phthalate	ND	U	50	26	5	04/13/05	05/05/05	KWG0505825	
Fluorene	ND	U	50	13	5	04/13/05	05/05/05	KWG0505825	
4-Chlorophenyl Phenyl Ether	ND	U	50	15	5	04/13/05	05/05/05	KWG0505825	
4-Nitroaniline	ND	U	100	26	5	04/13/05	05/05/05	KWG0505825	
2-Methyl-4,6-dinitrophenol	ND	U UJ	500	13	5	04/13/05	05/05/05	KWG0505825	
N-Nitrosodiphenylamine	ND	U	50	17	5	04/13/05	05/05/05	KWG0505825	
4-Bromophenyl Phenyl Ether	ND	U	50	11	5	04/13/05	05/05/05	KWG0505825	
Hexachlorobenzene	ND	U	50	16	5	04/13/05	05/05/05	KWG0505825	
Atrazine	ND	U	50	17	5	04/13/05	05/05/05	KWG0505825	
Pentachlorophenol	ND	U	500	64	5	04/13/05	05/05/05	KWG0505825	
Phenanthrene	ND	U	50	9.7	5	04/13/05	05/05/05	KWG0505825	
Anthracene	ND	U	50	11	5	04/13/05	05/05/05	KWG0505825	
Carbazole	ND	U	50	9.7	5	04/13/05	05/05/05	KWG0505825	
Di-n-butyl Phthalate	**24**	JD 50U	50	20	5	04/13/05	05/05/05	KWG0505825	
Fluoranthene	ND	U	50	17	5	04/13/05	05/05/05	KWG0505825	
Pyrene	ND	U	50	9.7	5	04/13/05	05/05/05	KWG0505825	
Butyl Benzyl Phthalate	ND	U	50	12	5	04/13/05	05/05/05	KWG0505825	
3,3'-Dichlorobenzidine	ND	U UJ	500	28	5	04/13/05	05/05/05	KWG0505825	
Benz(a)anthracene	ND	U	50	11	5	04/13/05	05/05/05	KWG0505825	
Chrysene	ND	U	50	11	5	04/13/05	05/05/05	KWG0505825	
Bis(2-ethylhexyl) Phthalate	**26**	JD 100U	1000	13	5	04/13/05	05/05/05	KWG0505825	
Di-n-octyl Phthalate	ND	U	50	9.0	5	04/13/05	05/05/05	KWG0505825	
Benzo(b)fluoranthene	ND	U	50	19	5	04/13/05	05/05/05	KWG0505825	
Benzo(k)fluoranthene	ND	U	50	19	5	04/13/05	05/05/05	KWG0505825	
Benzo(a)pyrene	ND	U	50	12	5	04/13/05	05/05/05	KWG0505825	
Indeno(1,2,3-cd)pyrene	ND	U	50	15	5	04/13/05	05/05/05	KWG0505825	
Dibenz(a,h)anthracene	ND	U	50	17	5	04/13/05	05/05/05	KWG0505825	
Benzo(g,h,i)perylene	ND	U	50	18	5	04/13/05	05/05/05	KWG0505825	

Comments:

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/05/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-SPN-SB01-0-0.5
Lab Code: K2502505-012

Units: ug/Kg
Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	40	11-87	05/05/05	Acceptable
Phenol-d6	43	20-99	05/05/05	Acceptable
Nitrobenzene-d5	42	10-99	05/05/05	Acceptable
2-Fluorobiphenyl	45	10-104	05/05/05	Acceptable
2,4,6-Tribromophenol	46	23-113	05/05/05	Acceptable
Terphenyl-d14	59	39-124	05/05/05	Acceptable

† **Analyte Comments**

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

6/14/05

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/05/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-SPN-SB01-0-0.5 DUP
Lab Code: K2502505-013

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	50	36	5	04/13/05	05/05/05	KWG0505825	
Phenol	ND	U	150	14	5	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethyl) Ether	ND	U	50	18	5	04/13/05	05/05/05	KWG0505825	
2-Chlorophenol	ND	U	50	13	5	04/13/05	05/05/05	KWG0505825	
2-Methylphenol	ND	U	50	25	5	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroisopropyl) Ether	ND	U	50	8.9	5	04/13/05	05/05/05	KWG0505825	
Acetophenone	ND	U	250	89	5	04/13/05	05/05/05	KWG0505825	
4-Methylphenol†	ND	U	50	22	5	04/13/05	05/05/05	KWG0505825	
N-Nitrosodi-n-propylamine	ND	U	50	24	5	04/13/05	05/05/05	KWG0505825	
Hexachloroethane	ND	U	50	17	5	04/13/05	05/05/05	KWG0505825	
Nitrobenzene	ND	U	50	15	5	04/13/05	05/05/05	KWG0505825	
Isophorone	ND	U	50	12	5	04/13/05	05/05/05	KWG0505825	
2-Nitrophenol	ND	U	50	20	5	04/13/05	05/05/05	KWG0505825	
2,4-Dimethylphenol	ND	U	250	41	5	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethoxy)methane	ND	U	50	9.6	5	04/13/05	05/05/05	KWG0505825	
2,4-Dichlorophenol	ND	U	50	14	5	04/13/05	05/05/05	KWG0505825	
Naphthalene	ND	U	50	9.6	5	04/13/05	05/05/05	KWG0505825	
4-Chloroaniline	ND	U	50	16	5	04/13/05	05/05/05	KWG0505825	
Hexachlorobutadiene	ND	U	50	11	5	04/13/05	05/05/05	KWG0505825	
Caprolactam	ND	U	99	89	5	04/13/05	05/05/05	KWG0505825	
Benzaldehyde	ND	U	99	65	5	04/13/05	05/05/05	KWG0505825	
4-Chloro-3-methylphenol	ND	U	50	16	5	04/13/05	05/05/05	KWG0505825	
2-Methylnaphthalene	ND	U	50	8.9	5	04/13/05	05/05/05	KWG0505825	
Hexachlorocyclopentadiene	ND	U	250	120	5	04/13/05	05/05/05	KWG0505825	
2,4,6-Trichlorophenol	ND	U	50	14	5	04/13/05	05/05/05	KWG0505825	
2,4,5-Trichlorophenol	ND	U	50	23	5	04/13/05	05/05/05	KWG0505825	
Biphenyl	ND	U	99	36	5	04/13/05	05/05/05	KWG0505825	
2-Chloronaphthalene	ND	U	50	27	5	04/13/05	05/05/05	KWG0505825	
2-Nitroaniline	ND	U	99	20	5	04/13/05	05/05/05	KWG0505825	
Dimethyl Phthalate	ND	U	50	14	5	04/13/05	05/05/05	KWG0505825	
2,6-Dinitrotoluene	ND	U	50	21	5	04/13/05	05/05/05	KWG0505825	
Acenaphthylene	ND	U	50	11	5	04/13/05	05/05/05	KWG0505825	
3-Nitroaniline	ND	U	99	20	5	04/13/05	05/05/05	KWG0505825	

Comments:

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/05/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-SPN-SB01-0-0.5 DUP
Lab Code: K2502505-013

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U	50	7.4	5	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrophenol	ND	U	990	270	5	04/13/05	05/05/05	KWG0505825	
4-Nitrophenol	ND	U	500	230	5	04/13/05	05/05/05	KWG0505825	
Dibenzofuran	ND	U	50	9.6	5	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrotoluene	ND	U	50	21	5	04/13/05	05/05/05	KWG0505825	
Diethyl Phthalate	ND	U	50	26	5	04/13/05	05/05/05	KWG0505825	
Fluorene	ND	U	50	13	5	04/13/05	05/05/05	KWG0505825	
4-Chlorophenyl Phenyl Ether	ND	U	50	15	5	04/13/05	05/05/05	KWG0505825	
4-Nitroaniline	ND	U	99	25	5	04/13/05	05/05/05	KWG0505825	
2-Methyl-4,6-dinitrophenol	ND	U UJ	500	13	5	04/13/05	05/05/05	KWG0505825	
N-Nitrosodiphenylamine	ND	U	50	17	5	04/13/05	05/05/05	KWG0505825	
4-Bromophenyl Phenyl Ether	ND	U	50	11	5	04/13/05	05/05/05	KWG0505825	
Hexachlorobenzene	ND	U	50	16	5	04/13/05	05/05/05	KWG0505825	
Atrazine	ND	U	50	17	5	04/13/05	05/05/05	KWG0505825	
Pentachlorophenol	ND	U	500	63	5	04/13/05	05/05/05	KWG0505825	
Phenanthrene	ND	U	50	9.6	5	04/13/05	05/05/05	KWG0505825	
Anthracene	ND	U	50	11	5	04/13/05	05/05/05	KWG0505825	
Carbazole	ND	U	50	9.6	5	04/13/05	05/05/05	KWG0505825	
Di-n-butyl Phthalate	ND	U	50	20	5	04/13/05	05/05/05	KWG0505825	
Fluoranthene	ND	U	50	17	5	04/13/05	05/05/05	KWG0505825	
Pyrene	ND	U	50	9.6	5	04/13/05	05/05/05	KWG0505825	
Butyl Benzyl Phthalate	ND	U	50	12	5	04/13/05	05/05/05	KWG0505825	
3,3'-Dichlorobenzidine	ND	U UJ	500	28	5	04/13/05	05/05/05	KWG0505825	
Benz(a)anthracene	ND	U	50	11	5	04/13/05	05/05/05	KWG0505825	
Chrysene	ND	U	50	11	5	04/13/05	05/05/05	KWG0505825	
Bis(2-ethylhexyl) Phthalate	**27**	JD 990U	990	13	5	04/13/05	05/05/05	KWG0505825	
Di-n-octyl Phthalate	ND	U	50	8.9	5	04/13/05	05/05/05	KWG0505825	
Benzo(b)fluoranthene	ND	U	50	19	5	04/13/05	05/05/05	KWG0505825	
Benzo(k)fluoranthene	ND	U	50	19	5	04/13/05	05/05/05	KWG0505825	
Benzo(a)pyrene	ND	U	50	12	5	04/13/05	05/05/05	KWG0505825	
Indeno(1,2,3-cd)pyrene	ND	U	50	14	5	04/13/05	05/05/05	KWG0505825	
Dibenz(a,h)anthracene	ND	U	50	17	5	04/13/05	05/05/05	KWG0505825	
Benzo(g,h,i)perylene	ND	U	50	17	5	04/13/05	05/05/05	KWG0505825	

Comments:

Client:	Battelle Memorial Institute	**Service Request:**	K2502505
Project:	Novato Ballfields/G486063	**Date Collected:**	04/05/2005
Sample Matrix:	Soil	**Date Received:**	04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	TO63-SPN-SB01-0-0.5 DUP	**Units:**	ug/Kg
Lab Code:	K2502505-013	**Basis:**	Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	60	11-87	05/05/05	Acceptable
Phenol-d6	63	20-99	05/05/05	Acceptable
Nitrobenzene-d5	58	10-99	05/05/05	Acceptable
2-Fluorobiphenyl	63	10-104	05/05/05	Acceptable
2,4,6-Tribromophenol	68	23-113	05/05/05	Acceptable
Terphenyl-d14	81	39-124	05/05/05	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

6/19/05

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/05/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-SPN-SB01-3-4
Lab Code: K2502505-014

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	10	6.2	1	04/13/05	05/05/05	KWG0505825	
Phenol	ND	U	30	2.4	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethyl) Ether	ND	U	10	3.1	1	04/13/05	05/05/05	KWG0505825	
2-Chlorophenol	ND	U	10	2.2	1	04/13/05	05/05/05	KWG0505825	
2-Methylphenol	ND	U	10	4.3	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroisopropyl) Ether	ND	U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
Acetophenone	ND	U	50	16	1	04/13/05	05/05/05	KWG0505825	
4-Methylphenol†	ND	U	10	3.7	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodi-n-propylamine	ND	U	10	4.1	1	04/13/05	05/05/05	KWG0505825	
Hexachloroethane	ND	U	10	2.8	1	04/13/05	05/05/05	KWG0505825	
Nitrobenzene	ND	U	10	2.6	1	04/13/05	05/05/05	KWG0505825	
Isophorone	ND	U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
2-Nitrophenol	ND	U	10	3.3	1	04/13/05	05/05/05	KWG0505825	
2,4-Dimethylphenol	ND	U	50	7.0	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethoxy)methane	ND	U	10	1.7	1	04/13/05	05/05/05	KWG0505825	
2,4-Dichlorophenol	ND	U	10	2.3	1	04/13/05	05/05/05	KWG0505825	
Naphthalene	ND	U	10	1.7	1	04/13/05	05/05/05	KWG0505825	
4-Chloroaniline	ND	U	10	2.7	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobutadiene	ND	U	10	1.8	1	04/13/05	05/05/05	KWG0505825	
Caprolactam	ND	U	20	16	1	04/13/05	05/05/05	KWG0505825	
Benzaldehyde	**21**		20	12	1	04/13/05	05/05/05	KWG0505825	
4-Chloro-3-methylphenol	ND	U	10	2.7	1	04/13/05	05/05/05	KWG0505825	
2-Methylnaphthalene	ND	U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
Hexachlorocyclopentadiene	ND	U	50	19	1	04/13/05	05/05/05	KWG0505825	
2,4,6-Trichlorophenol	ND	U	10	2.3	1	04/13/05	05/05/05	KWG0505825	
2,4,5-Trichlorophenol	ND	U	10	3.8	1	04/13/05	05/05/05	KWG0505825	
Biphenyl	ND	U	20	6.1	1	04/13/05	05/05/05	KWG0505825	
2-Chloronaphthalene	ND	U	10	4.6	1	04/13/05	05/05/05	KWG0505825	
2-Nitroaniline	ND	U	20	3.5	1	04/13/05	05/05/05	KWG0505825	
Dimethyl Phthalate	ND	U	10	2.3	1	04/13/05	05/05/05	KWG0505825	
2,6-Dinitrotoluene	ND	U	10	3.6	1	04/13/05	05/05/05	KWG0505825	
Acenaphthylene	ND	U	10	1.8	1	04/13/05	05/05/05	KWG0505825	
3-Nitroaniline	ND	U	20	3.3	1	04/13/05	05/05/05	KWG0505825	

Comments:

6/14/05

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/05/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-SPN-SB01-3-4
Lab Code: K2502505-014

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U	10	1.3	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrophenol	ND	U	200	46	1	04/13/05	05/05/05	KWG0505825	
4-Nitrophenol	ND	U	100	38	1	04/13/05	05/05/05	KWG0505825	
Dibenzofuran	ND	U	10	1.7	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrotoluene	ND	U	10	3.6	1	04/13/05	05/05/05	KWG0505825	
Diethyl Phthalate	ND	U	10	4.5	1	04/13/05	05/05/05	KWG0505825	
Fluorene	ND	U	10	2.2	1	04/13/05	05/05/05	KWG0505825	
4-Chlorophenyl Phenyl Ether	ND	U	10	2.6	1	04/13/05	05/05/05	KWG0505825	
4-Nitroaniline	ND	U	20	4.3	1	04/13/05	05/05/05	KWG0505825	
2-Methyl-4,6-dinitrophenol	ND	U UJ	100	2.2	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodiphenylamine	ND	U	10	2.8	1	04/13/05	05/05/05	KWG0505825	
4-Bromophenyl Phenyl Ether	ND	U	10	1.8	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobenzene	ND	U	10	2.7	1	04/13/05	05/05/05	KWG0505825	
Atrazine	ND	U	10	2.8	1	04/13/05	05/05/05	KWG0505825	
Pentachlorophenol	ND	U	100	11	1	04/13/05	05/05/05	KWG0505825	
Phenanthrene	ND	U	10	1.7	1	04/13/05	05/05/05	KWG0505825	
Anthracene	ND	U	10	1.8	1	04/13/05	05/05/05	KWG0505825	
Carbazole	ND	U	10	1.7	1	04/13/05	05/05/05	KWG0505825	
Di-n-butyl Phthalate	**29**	U	10	3.3	1	04/13/05	05/05/05	KWG0505825	
Fluoranthene	ND	U	10	2.8	1	04/13/05	05/05/05	KWG0505825	
Pyrene	ND	U	10	1.7	1	04/13/05	05/05/05	KWG0505825	
Butyl Benzyl Phthalate	**2.3**	J	10	1.9	1	04/13/05	05/05/05	KWG0505825	
3,3'-Dichlorobenzidine	ND	U UJ	100	4.7	1	04/13/05	05/05/05	KWG0505825	
Benz(a)anthracene	ND	U	10	1.8	1	04/13/05	05/05/05	KWG0505825	
Chrysene	ND	U	10	1.8	1	04/13/05	05/05/05	KWG0505825	
Bis(2-ethylhexyl) Phthalate	**360**		200	2.2	1	04/13/05	05/05/05	KWG0505825	
Di-n-octyl Phthalate	ND	U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
Benzo(b)fluoranthene	ND	U	10	3.2	1	04/13/05	05/05/05	KWG0505825	
Benzo(k)fluoranthene	ND	U	10	3.2	1	04/13/05	05/05/05	KWG0505825	
Benzo(a)pyrene	ND	U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
Indeno(1,2,3-cd)pyrene	ND	U	10	2.4	1	04/13/05	05/05/05	KWG0505825	
Dibenz(a,h)anthracene	ND	U	10	2.8	1	04/13/05	05/05/05	KWG0505825	
Benzo(g,h,i)perylene	ND	U	10	2.9	1	04/13/05	05/05/05	KWG0505825	

Comments:

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/05/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-SPN-SB01-3-4
Lab Code: K2502505-014

Units: ug/Kg
Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	48	11-87	05/05/05	Acceptable
Phenol-d6	52	20-99	05/05/05	Acceptable
Nitrobenzene-d5	39	10-99	05/05/05	Acceptable
2-Fluorobiphenyl	46	10-104	05/05/05	Acceptable
2,4,6-Tribromophenol	68	23-113	05/05/05	Acceptable
Terphenyl-d14	86	39-124	05/05/05	Acceptable

† **Analyte Comments**

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

6/14/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/05/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-RSP-SB02-0-0.5
Lab Code: K2502505-015

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	10	7.1	1	04/13/05	05/05/05	KWG0505825	
Phenol	ND	U	30	2.8	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethyl) Ether	ND	U	10	3.5	1	04/13/05	05/05/05	KWG0505825	
2-Chlorophenol	ND	U	10	2.5	1	04/13/05	05/05/05	KWG0505825	
2-Methylphenol	ND	U	10	5.0	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroisopropyl) Ether	ND	U	10	1.8	1	04/13/05	05/05/05	KWG0505825	
Acetophenone	ND	U	50	18	1	04/13/05	05/05/05	KWG0505825	
4-Methylphenol†	ND	U	10	4.2	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodi-n-propylamine	ND	U	10	4.7	1	04/13/05	05/05/05	KWG0505825	
Hexachloroethane	ND	U	10	3.2	1	04/13/05	05/05/05	KWG0505825	
Nitrobenzene	ND	U	10	2.9	1	04/13/05	05/05/05	KWG0505825	
Isophorone	ND	U	10	2.4	1	04/13/05	05/05/05	KWG0505825	
2-Nitrophenol	ND	U	10	3.8	1	04/13/05	05/05/05	KWG0505825	
2,4-Dimethylphenol	ND	U	50	8.0	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethoxy)methane	ND	U	10	1.9	1	04/13/05	05/05/05	KWG0505825	
2,4-Dichlorophenol	ND	U	10	2.7	1	04/13/05	05/05/05	KWG0505825	
Naphthalene	ND	U	10	1.9	1	04/13/05	05/05/05	KWG0505825	
4-Chloroaniline	ND	U	10	3.1	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobutadiene	ND	U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
Caprolactam	ND	U	20	18	1	04/13/05	05/05/05	KWG0505825	
Benzaldehyde	**33**		20	13	1	04/13/05	05/05/05	KWG0505825	
4-Chloro-3-methylphenol	ND	U	10	3.1	1	04/13/05	05/05/05	KWG0505825	
2-Methylnaphthalene	ND	U	10	1.8	1	04/13/05	05/05/05	KWG0505825	
Hexachlorocyclopentadiene	ND	U	50	22	1	04/13/05	05/05/05	KWG0505825	
2,4,6-Trichlorophenol	ND	U	10	2.7	1	04/13/05	05/05/05	KWG0505825	
2,4,5-Trichlorophenol	ND	U	10	4.4	1	04/13/05	05/05/05	KWG0505825	
Biphenyl	ND	U	20	7.0	1	04/13/05	05/05/05	KWG0505825	
2-Chloronaphthalene	ND	U	10	5.3	1	04/13/05	05/05/05	KWG0505825	
2-Nitroaniline	ND	U	20	4.0	1	04/13/05	05/05/05	KWG0505825	
Dimethyl Phthalate	ND	U	10	2.7	1	04/13/05	05/05/05	KWG0505825	
2,6-Dinitrotoluene	ND	U	10	4.1	1	04/13/05	05/05/05	KWG0505825	
Acenaphthylene	ND	U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
3-Nitroaniline	ND	U	20	3.8	1	04/13/05	05/05/05	KWG0505825	

Comments:

6/19/05

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/05/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-RSP-SB02-0-0.5
Lab Code: K2502505-015

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q		MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U		10	1.5	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrophenol	ND	U		200	53	1	04/13/05	05/05/05	KWG0505825	
4-Nitrophenol	ND	U		100	44	1	04/13/05	05/05/05	KWG0505825	
Dibenzofuran	ND	U		10	1.9	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrotoluene	ND	U		10	4.1	1	04/13/05	05/05/05	KWG0505825	
Diethyl Phthalate	ND	U		10	5.1	1	04/13/05	05/05/05	KWG0505825	
Fluorene	ND	U		10	2.5	1	04/13/05	05/05/05	KWG0505825	
4-Chlorophenyl Phenyl Ether	ND	U		10	2.9	1	04/13/05	05/05/05	KWG0505825	
4-Nitroaniline	ND	U		20	5.0	1	04/13/05	05/05/05	KWG0505825	
2-Methyl-4,6-dinitrophenol	ND	U	UJ	100	2.5	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodiphenylamine	ND	U		10	3.2	1	04/13/05	05/05/05	KWG0505825	
4-Bromophenyl Phenyl Ether	ND	U		10	2.1	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobenzene	ND	U		10	3.1	1	04/13/05	05/05/05	KWG0505825	
Atrazine	ND	U		10	3.2	1	04/13/05	05/05/05	KWG0505825	
Pentachlorophenol	ND	U		100	13	1	04/13/05	05/05/05	KWG0505825	
Phenanthrene	ND	U		10	1.9	1	04/13/05	05/05/05	KWG0505825	
Anthracene	ND	U		10	2.1	1	04/13/05	05/05/05	KWG0505825	
Carbazole	ND	U		10	1.9	1	04/13/05	05/05/05	KWG0505825	
Di-n-butyl Phthalate	**41**		U	10	3.8	1	04/13/05	05/05/05	KWG0505825	
Fluoranthene	ND	U		10	3.2	1	04/13/05	05/05/05	KWG0505825	
Pyrene	ND	U		10	1.9	1	04/13/05	05/05/05	KWG0505825	
Butyl Benzyl Phthalate	ND	U		10	2.2	1	04/13/05	05/05/05	KWG0505825	
3,3'-Dichlorobenzidine	ND	U	UJ	100	5.4	1	04/13/05	05/05/05	KWG0505825	
Benz(a)anthracene	ND	U		10	2.1	1	04/13/05	05/05/05	KWG0505825	
Chrysene	ND	U		10	2.1	1	04/13/05	05/05/05	KWG0505825	
Bis(2-ethylhexyl) Phthalate	**31**	J	200U	200	2.5	1	04/13/05	05/05/05	KWG0505825	
Di-n-octyl Phthalate	ND	U		10	1.8	1	04/13/05	05/05/05	KWG0505825	
Benzo(b)fluoranthene	ND	U		10	3.7	1	04/13/05	05/05/05	KWG0505825	
Benzo(k)fluoranthene	ND	U		10	3.7	1	04/13/05	05/05/05	KWG0505825	
Benzo(a)pyrene	ND	U		10	2.4	1	04/13/05	05/05/05	KWG0505825	
Indeno(1,2,3-cd)pyrene	ND	U		10	2.8	1	04/13/05	05/05/05	KWG0505825	
Dibenz(a,h)anthracene	ND	U		10	3.2	1	04/13/05	05/05/05	KWG0505825	
Benzo(g,h,i)perylene	ND	U		10	3.4	1	04/13/05	05/05/05	KWG0505825	

Comments:

6/19/05

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/05/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-RSP-SB02-0-0.5
Lab Code: K2502505-015

Units: ug/Kg
Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	58	11-87	05/05/05	Acceptable
Phenol-d6	65	20-99	05/05/05	Acceptable
Nitrobenzene-d5	57	10-99	05/05/05	Acceptable
2-Fluorobiphenyl	67	10-104	05/05/05	Acceptable
2,4,6-Tribromophenol	87	23-113	05/05/05	Acceptable
Terphenyl-d14	103	39-124	05/05/05	Acceptable

† **Analyte Comments**

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

6/19/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/05/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-RSP-SB02-5-6
Lab Code: K2502505-016

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	10	5.8	1	04/13/05	05/05/05	KWG0505825	
Phenol	ND	U	30	2.3	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethyl) Ether	ND	U	10	2.9	1	04/13/05	05/05/05	KWG0505825	
2-Chlorophenol	ND	U	10	2.0	1	04/13/05	05/05/05	KWG0505825	
2-Methylphenol	ND	U	10	4.0	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroisopropyl) Ether	ND	U	10	1.5	1	04/13/05	05/05/05	KWG0505825	
Acetophenone	ND	U	50	15	1	04/13/05	05/05/05	KWG0505825	
4-Methylphenol†	ND	U	10	3.5	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodi-n-propylamine	ND	U	10	3.8	1	04/13/05	05/05/05	KWG0505825	
Hexachloroethane	ND	U	10	2.6	1	04/13/05	05/05/05	KWG0505825	
Nitrobenzene	ND	U	10	2.4	1	04/13/05	05/05/05	KWG0505825	
Isophorone	ND	U	10	1.9	1	04/13/05	05/05/05	KWG0505825	
2-Nitrophenol	ND	U	10	3.1	1	04/13/05	05/05/05	KWG0505825	
2,4-Dimethylphenol	ND	U	50	6.5	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethoxy)methane	ND	U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
2,4-Dichlorophenol	ND	U	10	2.2	1	04/13/05	05/05/05	KWG0505825	
Naphthalene	ND	U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
4-Chloroaniline	ND	U	10	2.5	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobutadiene	ND	U	10	1.7	1	04/13/05	05/05/05	KWG0505825	
Caprolactam	ND	U	20	15	1	04/13/05	05/05/05	KWG0505825	
Benzaldehyde	**24**		20	11	1	04/13/05	05/05/05	KWG0505825	
4-Chloro-3-methylphenol	ND	U	10	2.5	1	04/13/05	05/05/05	KWG0505825	
2-Methylnaphthalene	ND	U	10	1.5	1	04/13/05	05/05/05	KWG0505825	
Hexachlorocyclopentadiene	ND	U	50	18	1	04/13/05	05/05/05	KWG0505825	
2,4,6-Trichlorophenol	ND	U	10	2.2	1	04/13/05	05/05/05	KWG0505825	
2,4,5-Trichlorophenol	ND	U	10	3.6	1	04/13/05	05/05/05	KWG0505825	
Biphenyl	ND	U	20	5.7	1	04/13/05	05/05/05	KWG0505825	
2-Chloronaphthalene	ND	U	10	4.3	1	04/13/05	05/05/05	KWG0505825	
2-Nitroaniline	ND	U	20	3.2	1	04/13/05	05/05/05	KWG0505825	
Dimethyl Phthalate	ND	U	10	2.2	1	04/13/05	05/05/05	KWG0505825	
2,6-Dinitrotoluene	ND	U	10	3.3	1	04/13/05	05/05/05	KWG0505825	
Acenaphthylene	ND	U	10	1.7	1	04/13/05	05/05/05	KWG0505825	
3-Nitroaniline	ND	U	20	3.1	1	04/13/05	05/05/05	KWG0505825	

Comments:

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/05/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-RSP-SB02-5-6
Lab Code: K2502505-016

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q		MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U		10	1.2	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrophenol	ND	U		200	43	1	04/13/05	05/05/05	KWG0505825	
4-Nitrophenol	ND	U		100	36	1	04/13/05	05/05/05	KWG0505825	
Dibenzofuran	ND	U		10	1.6	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrotoluene	ND	U		10	3.3	1	04/13/05	05/05/05	KWG0505825	
Diethyl Phthalate	ND	U		10	4.2	1	04/13/05	05/05/05	KWG0505825	
Fluorene	ND	U		10	2.0	1	04/13/05	05/05/05	KWG0505825	
4-Chlorophenyl Phenyl Ether	ND	U		10	2.4	1	04/13/05	05/05/05	KWG0505825	
4-Nitroaniline	ND	U		20	4.0	1	04/13/05	05/05/05	KWG0505825	
2-Methyl-4,6-dinitrophenol	ND	U	UJ	100	2.0	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodiphenylamine	ND	U		10	2.6	1	04/13/05	05/05/05	KWG0505825	
4-Bromophenyl Phenyl Ether	ND	U		10	1.7	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobenzene	ND	U		10	2.5	1	04/13/05	05/05/05	KWG0505825	
Atrazine	ND	U		10	2.6	1	04/13/05	05/05/05	KWG0505825	
Pentachlorophenol	ND	U		100	10	1	04/13/05	05/05/05	KWG0505825	
Phenanthrene	ND	U		10	1.6	1	04/13/05	05/05/05	KWG0505825	
Anthracene	ND	U		10	1.7	1	04/13/05	05/05/05	KWG0505825	
Carbazole	ND	U		10	1.6	1	04/13/05	05/05/05	KWG0505825	
Di-n-butyl Phthalate	**36**		U	10	3.1	1	04/13/05	05/05/05	KWG0505825	
Fluoranthene	ND	U		10	2.6	1	04/13/05	05/05/05	KWG0505825	
Pyrene	ND	U		10	1.6	1	04/13/05	05/05/05	KWG0505825	
Butyl Benzyl Phthalate	ND	U		10	1.8	1	04/13/05	05/05/05	KWG0505825	
3,3'-Dichlorobenzidine	ND	U	UJ	100	4.4	1	04/13/05	05/05/05	KWG0505825	
Benz(a)anthracene	ND	U		10	1.7	1	04/13/05	05/05/05	KWG0505825	
Chrysene	ND	U		10	1.7	1	04/13/05	05/05/05	KWG0505825	
Bis(2-ethylhexyl) Phthalate	**36**	J	200U	200	2.0	1	04/13/05	05/05/05	KWG0505825	
Di-n-octyl Phthalate	ND	U		10	1.5	1	04/13/05	05/05/05	KWG0505825	
Benzo(b)fluoranthene	ND	U		10	3.0	1	04/13/05	05/05/05	KWG0505825	
Benzo(k)fluoranthene	ND	U		10	3.0	1	04/13/05	05/05/05	KWG0505825	
Benzo(a)pyrene	ND	U		10	1.9	1	04/13/05	05/05/05	KWG0505825	
Indeno(1,2,3-cd)pyrene	ND	U		10	2.3	1	04/13/05	05/05/05	KWG0505825	
Dibenz(a,h)anthracene	ND	U		10	2.6	1	04/13/05	05/05/05	KWG0505825	
Benzo(g,h,i)perylene	ND	U		10	2.8	1	04/13/05	05/05/05	KWG0505825	

Comments:

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/05/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-RSP-SB02-5-6
Lab Code: K2502505-016

Units: ug/Kg
Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	58	11-87	05/05/05	Acceptable
Phenol-d6	61	20-99	05/05/05	Acceptable
Nitrobenzene-d5	55	10-99	05/05/05	Acceptable
2-Fluorobiphenyl	64	10-104	05/05/05	Acceptable
2,4,6-Tribromophenol	69	23-113	05/05/05	Acceptable
Terphenyl-d14	101	39-124	05/05/05	Acceptable

† **Analyte Comments**

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

6/19/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/05/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-RSP-SB03-0-0.5
Lab Code: K2502505-017

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	10	5.6	1	04/13/05	05/05/05	KWG0505825	
Phenol	ND	U	30	2.2	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethyl) Ether	ND	U	10	2.8	1	04/13/05	05/05/05	KWG0505825	
2-Chlorophenol	ND	U	10	2.0	1	04/13/05	05/05/05	KWG0505825	
2-Methylphenol	ND	U	10	3.9	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroisopropyl) Ether	ND	U	10	1.4	1	04/13/05	05/05/05	KWG0505825	
Acetophenone	ND	U	50	14	1	04/13/05	05/05/05	KWG0505825	
4-Methylphenol†	ND	U	10	3.3	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodi-n-propylamine	ND	U	10	3.7	1	04/13/05	05/05/05	KWG0505825	
Hexachloroethane	ND	U	10	2.5	1	04/13/05	05/05/05	KWG0505825	
Nitrobenzene	ND	U	10	2.3	1	04/13/05	05/05/05	KWG0505825	
Isophorone	ND	U	10	1.9	1	04/13/05	05/05/05	KWG0505825	
2-Nitrophenol	ND	U	10	3.0	1	04/13/05	05/05/05	KWG0505825	
2,4-Dimethylphenol	ND	U	50	6.2	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethoxy)methane	ND	U	10	1.5	1	04/13/05	05/05/05	KWG0505825	
2,4-Dichlorophenol	ND	U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
Naphthalene	ND	U	10	1.5	1	04/13/05	05/05/05	KWG0505825	
4-Chloroaniline	ND	U	10	2.4	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobutadiene	ND	U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
Caprolactam	ND	U	20	14	1	04/13/05	05/05/05	KWG0505825	
Benzaldehyde	**26**		20	10	1	04/13/05	05/05/05	KWG0505825	
4-Chloro-3-methylphenol	ND	U	10	2.4	1	04/13/05	05/05/05	KWG0505825	
2-Methylnaphthalene	ND	U	10	1.4	1	04/13/05	05/05/05	KWG0505825	
Hexachlorocyclopentadiene	ND	U	50	17	1	04/13/05	05/05/05	KWG0505825	
2,4,6-Trichlorophenol	ND	U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
2,4,5-Trichlorophenol	ND	U	10	3.4	1	04/13/05	05/05/05	KWG0505825	
Biphenyl	ND	U	20	5.5	1	04/13/05	05/05/05	KWG0505825	
2-Chloronaphthalene	ND	U	10	4.1	1	04/13/05	05/05/05	KWG0505825	
2-Nitroaniline	ND	U	20	3.1	1	04/13/05	05/05/05	KWG0505825	
Dimethyl Phthalate	ND	U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
2,6-Dinitrotoluene	ND	U	10	3.2	1	04/13/05	05/05/05	KWG0505825	
Acenaphthylene	ND	U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
3-Nitroaniline	ND	U	20	3.0	1	04/13/05	05/05/05	KWG0505825	

Comments:

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/05/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-RSP-SB03-0-0.5
Lab Code: K2502505-017

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q		MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U		10	1.2	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrophenol	ND	U		200	41	1	04/13/05	05/05/05	KWG0505825	
4-Nitrophenol	ND	U		100	34	1	04/13/05	05/05/05	KWG0505825	
Dibenzofuran	ND	U		10	1.5	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrotoluene	ND	U		10	3.2	1	04/13/05	05/05/05	KWG0505825	
Diethyl Phthalate	**6.7**	J		10	4.0	1	04/13/05	05/05/05	KWG0505825	
Fluorene	ND	U		10	2.0	1	04/13/05	05/05/05	KWG0505825	
4-Chlorophenyl Phenyl Ether	ND	U		10	2.3	1	04/13/05	05/05/05	KWG0505825	
4-Nitroaniline	ND	U		20	3.9	1	04/13/05	05/05/05	KWG0505825	
2-Methyl-4,6-dinitrophenol	ND	U	UJ	100	2.0	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodiphenylamine	ND	U		10	2.5	1	04/13/05	05/05/05	KWG0505825	
4-Bromophenyl Phenyl Ether	ND	U		10	1.6	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobenzene	ND	U		10	2.4	1	04/13/05	05/05/05	KWG0505825	
Atrazine	ND	U		10	2.5	1	04/13/05	05/05/05	KWG0505825	
Pentachlorophenol	ND	U		100	9.6	1	04/13/05	05/05/05	KWG0505825	
Phenanthrene	ND	U		10	1.5	1	04/13/05	05/05/05	KWG0505825	
Anthracene	ND	U		10	1.6	1	04/13/05	05/05/05	KWG0505825	
Carbazole	ND	U		10	1.5	1	04/13/05	05/05/05	KWG0505825	
Di-n-butyl Phthalate	**35**		U	10	3.0	1	04/13/05	05/05/05	KWG0505825	
Fluoranthene	ND	U		10	2.5	1	04/13/05	05/05/05	KWG0505825	
Pyrene	ND	U		10	1.5	1	04/13/05	05/05/05	KWG0505825	
Butyl Benzyl Phthalate	ND	U		10	1.7	1	04/13/05	05/05/05	KWG0505825	
3,3'-Dichlorobenzidine	ND	U	UJ	100	4.2	1	04/13/05	05/05/05	KWG0505825	
Benz(a)anthracene	ND	U		10	1.6	1	04/13/05	05/05/05	KWG0505825	
Chrysene	ND	U		10	1.6	1	04/13/05	05/05/05	KWG0505825	
Bis(2-ethylhexyl) Phthalate	**87**	J		200	2.0	1	04/13/05	05/05/05	KWG0505825	
Di-n-octyl Phthalate	ND	U		10	1.4	1	04/13/05	05/05/05	KWG0505825	
Benzo(b)fluoranthene	ND	U		10	2.9	1	04/13/05	05/05/05	KWG0505825	
Benzo(k)fluoranthene	ND	U		10	2.9	1	04/13/05	05/05/05	KWG0505825	
Benzo(a)pyrene	ND	U		10	1.9	1	04/13/05	05/05/05	KWG0505825	
Indeno(1,2,3-cd)pyrene	ND	U		10	2.2	1	04/13/05	05/05/05	KWG0505825	
Dibenz(a,h)anthracene	ND	U		10	2.5	1	04/13/05	05/05/05	KWG0505825	
Benzo(g,h,i)perylene	ND	U		10	2.6	1	04/13/05	05/05/05	KWG0505825	

Comments:

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/05/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-RSP-SB03-0-0.5
Lab Code: K2502505-017

Units: ug/Kg
Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	61	11-87	05/05/05	Acceptable
Phenol-d6	65	20-99	05/05/05	Acceptable
Nitrobenzene-d5	57	10-99	05/05/05	Acceptable
2-Fluorobiphenyl	68	10-104	05/05/05	Acceptable
2,4,6-Tribromophenol	75	23-113	05/05/05	Acceptable
Terphenyl-d14	93	39-124	05/05/05	Acceptable

† **Analyte Comments**

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

6/14/05

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/05/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-RSP-SB03-5-6
Lab Code: K2502505-018

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	9.9	5.7	1	04/13/05	05/05/05	KWG0505825	
Phenol	ND	U	30	2.3	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethyl) Ether	ND	U	9.9	2.8	1	04/13/05	05/05/05	KWG0505825	
2-Chlorophenol	ND	U	9.9	2.0	1	04/13/05	05/05/05	KWG0505825	
2-Methylphenol	ND	U	9.9	4.0	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroisopropyl) Ether	ND	U	9.9	1.4	1	04/13/05	05/05/05	KWG0505825	
Acetophenone	ND	U	50	14	1	04/13/05	05/05/05	KWG0505825	
4-Methylphenol†	ND	U	9.9	3.4	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodi-n-propylamine	ND	U	9.9	3.8	1	04/13/05	05/05/05	KWG0505825	
Hexachloroethane	ND	U	9.9	2.6	1	04/13/05	05/05/05	KWG0505825	
Nitrobenzene	ND	U	9.9	2.4	1	04/13/05	05/05/05	KWG0505825	
Isophorone	ND	U	9.9	1.9	1	04/13/05	05/05/05	KWG0505825	
2-Nitrophenol	ND	U	9.9	3.1	1	04/13/05	05/05/05	KWG0505825	
2,4-Dimethylphenol	ND	U	50	6.4	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethoxy)methane	ND	U	9.9	1.6	1	04/13/05	05/05/05	KWG0505825	
2,4-Dichlorophenol	ND	U	9.9	2.1	1	04/13/05	05/05/05	KWG0505825	
Naphthalene	ND	U	9.9	1.6	1	04/13/05	05/05/05	KWG0505825	
4-Chloroaniline	ND	U	9.9	2.5	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobutadiene	ND	U	9.9	1.7	1	04/13/05	05/05/05	KWG0505825	
Caprolactam	ND	U	20	14	1	04/13/05	05/05/05	KWG0505825	
Benzaldehyde	**28**		20	11	1	04/13/05	05/05/05	KWG0505825	
4-Chloro-3-methylphenol	ND	U	9.9	2.5	1	04/13/05	05/05/05	KWG0505825	
2-Methylnaphthalene	ND	U	9.9	1.4	1	04/13/05	05/05/05	KWG0505825	
Hexachlorocyclopentadiene	ND	U	50	18	1	04/13/05	05/05/05	KWG0505825	
2,4,6-Trichlorophenol	ND	U	9.9	2.1	1	04/13/05	05/05/05	KWG0505825	
2,4,5-Trichlorophenol	ND	U	9.9	3.5	1	04/13/05	05/05/05	KWG0505825	
Biphenyl	ND	U	20	5.6	1	04/13/05	05/05/05	KWG0505825	
2-Chloronaphthalene	ND	U	9.9	4.2	1	04/13/05	05/05/05	KWG0505825	
2-Nitroaniline	ND	U	20	3.2	1	04/13/05	05/05/05	KWG0505825	
Dimethyl Phthalate	ND	U	9.9	2.1	1	04/13/05	05/05/05	KWG0505825	
2,6-Dinitrotoluene	ND	U	9.9	3.3	1	04/13/05	05/05/05	KWG0505825	
Acenaphthylene	ND	U	9.9	1.7	1	04/13/05	05/05/05	KWG0505825	
3-Nitroaniline	ND	U	20	3.1	1	04/13/05	05/05/05	KWG0505825	

Comments:

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/05/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-RSP-SB03-5-6
Lab Code: K2502505-018

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q		MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U		9.9	1.2	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrophenol	ND	U		200	42	1	04/13/05	05/05/05	KWG0505825	
4-Nitrophenol	ND	U		99	35	1	04/13/05	05/05/05	KWG0505825	
Dibenzofuran	ND	U		9.9	1.6	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrotoluene	ND	U		9.9	3.3	1	04/13/05	05/05/05	KWG0505825	
Diethyl Phthalate	**5.3**	J		9.9	4.1	1	04/13/05	05/05/05	KWG0505825	
Fluorene	ND	U		9.9	2.0	1	04/13/05	05/05/05	KWG0505825	
4-Chlorophenyl Phenyl Ether	ND	U		9.9	2.4	1	04/13/05	05/05/05	KWG0505825	
4-Nitroaniline	ND	U		20	4.0	1	04/13/05	05/05/05	KWG0505825	
2-Methyl-4,6-dinitrophenol	ND	U	UJ	99	2.0	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodiphenylamine	ND	U		9.9	2.6	1	04/13/05	05/05/05	KWG0505825	
4-Bromophenyl Phenyl Ether	ND	U		9.9	1.7	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobenzene	ND	U		9.9	2.5	1	04/13/05	05/05/05	KWG0505825	
Atrazine	ND	U		9.9	2.6	1	04/13/05	05/05/05	KWG0505825	
Pentachlorophenol	ND	U		99	9.9	1	04/13/05	05/05/05	KWG0505825	
Phenanthrene	ND	U		9.9	1.6	1	04/13/05	05/05/05	KWG0505825	
Anthracene	ND	U		9.9	1.7	1	04/13/05	05/05/05	KWG0505825	
Carbazole	ND	U		9.9	1.6	1	04/13/05	05/05/05	KWG0505825	
Di-n-butyl Phthalate	**28**		U	9.9	3.1	1	04/13/05	05/05/05	KWG0505825	
Fluoranthene	ND	U		9.9	2.6	1	04/13/05	05/05/05	KWG0505825	
Pyrene	ND	U		9.9	1.6	1	04/13/05	05/05/05	KWG0505825	
Butyl Benzyl Phthalate	ND	U		9.9	1.8	1	04/13/05	05/05/05	KWG0505825	
3,3'-Dichlorobenzidine	ND	U	UJ	99	4.3	1	04/13/05	05/05/05	KWG0505825	
Benz(a)anthracene	ND	U		9.9	1.7	1	04/13/05	05/05/05	KWG0505825	
Chrysene	ND	U		9.9	1.7	1	04/13/05	05/05/05	KWG0505825	
Bis(2-ethylhexyl) Phthalate	**80**	J	2004	200	2.0	1	04/13/05	05/05/05	KWG0505825	
Di-n-octyl Phthalate	ND	U		9.9	1.4	1	04/13/05	05/05/05	KWG0505825	
Benzo(b)fluoranthene	ND	U		9.9	3.0	1	04/13/05	05/05/05	KWG0505825	
Benzo(k)fluoranthene	ND	U		9.9	3.0	1	04/13/05	05/05/05	KWG0505825	
Benzo(a)pyrene	ND	U		9.9	1.9	1	04/13/05	05/05/05	KWG0505825	
Indeno(1,2,3-cd)pyrene	ND	U		9.9	2.3	1	04/13/05	05/05/05	KWG0505825	
Dibenz(a,h)anthracene	ND	U		9.9	2.6	1	04/13/05	05/05/05	KWG0505825	
Benzo(g,h,i)perylene	ND	U		9.9	2.7	1	04/13/05	05/05/05	KWG0505825	

Comments:

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502505
Date Collected: 04/05/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-RSP-SB03-5-6
Lab Code: K2502505-018

Units: ug/Kg
Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	59	11-87	05/05/05	Acceptable
Phenol-d6	61	20-99	05/05/05	Acceptable
Nitrobenzene-d5	53	10-99	05/05/05	Acceptable
2-Fluorobiphenyl	59	10-104	05/05/05	Acceptable
2,4,6-Tribromophenol	72	23-113	05/05/05	Acceptable
Terphenyl-d14	99	39-124	05/05/05	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

4/19/05

LDC #: 13575C2
SDG #: K2502505
Laboratory: Columbia Analytical Services

VALIDATION COMPLETENESS WORKSHEET
Level III/IV

Date: 6/13/05
Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/5-6/05
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	SW	%RSD≤30/15. r^2 SPCCs
IV.	Continuing calibration	SW	%D≤20. ICV≤≥70 d
V.	Blanks	SW	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	A	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	Not reviewed for Level III validation.
XII.	Compound quantitation/CRQLs	A	Not reviewed for Level III validation.
XIII.	Tentatively identified compounds (TICs)	N	Not reviewed for Level III validation.
XIV.	System performance	A	Not reviewed for Level III validation.
XV.	Overall assessment of data	A	
XVI.	Field duplicates	SW	D=12+13
XVII.	Field blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: ** Indicates sample underwent Level IV validation

MS Soils

1 2	TO63-R3-SB04-0-0.5	11 3	TO63-SPN-SB03-4-5	21 1	KWG0505P5-5	31	
2 A	TO63-R3-SB04-2-3**	12 3	TO63-SPN-SB01-0-0.5	22		32	
3 5	TO63-R3-SB01-0-0.5	13 3 1	TO63-SPN-SB01-0-0.5 Dup	23		33	
4 3	TO63-R3-SB01-4-5	14 3	TO63-SPN-SB01-3-4**	24		34	
5 3	TO63-R3-SB02-0-0.5	15 3	TO63-RSP-SB02-0-0.5	25		35	
6 3	TO63-R3-SB03-0-0.5**	16 3	TO63-RSP-SB02-5-6**	26		36	
7 3 1A	TO63-R4-SB03-0-0.5	17 3	TO63-RSP-SB03-0-0.5	27		37	
8 3	TO63-R4-SB03-3-4	18 3	TO63-RSP-SB03-5-6	28		38	
9 3	TO63-R4-SB02-0-0.5	19 1	TO63-R4-SB03-0-0.5MS	29		39	
10 3	TO63-R4-SB01-0-0.5**	20 1	TO63-R4-SB03-0-0.5MSD	30		40	

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

A. Phenol**	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol**	III. Benzo(a)pyrene**
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol**	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene**	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol*	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene**	T. 4-Chloroaniline	II. 4-Nitrophenol*	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene**	JJ. Dibenzofuran	YY. Fluoranthene**	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol**	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene*	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine*	Y. 2,4,6-Trichlorophenol**	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT.
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)**	FFF. Di-n-octylphthalate**	UUU.
N. 2-Nitrophenol**	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

LDC #: 18575C2
SDG #: K2502505

VALIDATION FINDINGS CHECKLIST

Reviewer: A
2nd Reviewer: A

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) ≥ 0.05?		✓		
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?		✓		
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 13575c2
SDG #: K2502505

VALIDATION FINDINGS CHECKLIST

Reviewer: q
2nd Reviewer: q

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?		✓		
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓			
XVII. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 13575C2
SDG #: K2502905

VALIDATION FINDINGS WORKSHEET
Initial Calibration

Page: 1 of 1
Reviewer: 9
2nd Reviewer: 8

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Did the laboratory conduct an acceptable 5 point calibration prior to sample analysis?
(Y) N N/A Were percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCC's and SPCC's?
(Y) N N/A Was a curve fit used for evaluation? If yes, what was the acceptance criteria used for evaluation?_____
(Y) N N/A Did the initial calibration meet the acceptance criteria?
Y (N) N/A Were all %RSDs and RRFs within the validation criteria of ≤30 %RSD and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %RSD (Limit: ≤30.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	5/2/05	ICAL2	PP	23.6 (≤15)		1, 3-20, BLK	J/UJ/A
	5/5/05	ICAL2	HH	26.8 (≤15)		2	J/UJ/A

INICAL.2S

LDC #: 13575C2
SDG #: K2502505

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Reviewer: 9
2nd Reviewer: 9

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Was a continuing calibration standard analyzed at least once every 12 hours of sample analysis for each instrument?
(Y) N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y (N) N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ~~≤25.0%~~ ≤20%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	5/2/05	0502F017-18 ICV	BBB	29		1.3-20. Blk	V/MV/10
	5/5/05	0505F017-18 (ICV)	BBB	27		2	V/MV/A
	5/3/05	0503F001-2	X	24		7.19-20. Blk	V/MV/A
			PP	26			↓
			BBB	30			
	5/4/05	0504F001-2	X	22		1	V/MV/A
			HH	27			↓
	5/10/05	0510F001-2	V	23		3	V/MV/A

LDC #: 13575C2
SDG #: 0502505

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: 9
2nd Reviewer: 9

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank analyzed for each matrix?
Y N N/A Was a method blank analyzed for each concentration preparation level?
Y N N/A Was a method blank associated with every sample?
Y N N/A Was the blank contaminated? If yes, please see qualification below.

Blank extraction date: 4/3/05 **Blank analysis date:** 5/3/05
Conc. units: ug/L Associated Samples: All

Compound	Blank ID	Sample Identification								
KWG	0505825-5	1	2	3	4	5	6	7 (5)	8	9
XX	5.6	86/10 U		15/U	9.1/10 U	22/U	15/U	31/50 U	13/U	27/U
ZZZ	8.6	67/200 U	20/200 U	(250)	51/200 U	(130)	(370)	58/1000 U	23/200 U	69/200 U

Blank extraction date: Soil **Blank analysis date:**
Conc. units: Associated Samples: All

Compound	Blank ID	Sample Identification								
KWG	0505825-5	10	11	12 (5)	13 (5)	14	15	16	17	18
XX	5.6	17/U	35/U	24/50 U		29/U	41/U	36/U	35/U	28/U
ZZZ	8.6	18/200 U	17/200 U	26/1000 U	27/990 U	(360)	31/200 U	36/200 U	(87)	80/200 U

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 13575C2
SDG #: K2502505

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Page: 1 of 1
Reviewer: 9
2nd reviewer: 9

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

(Y) N N/A Were field duplicate pairs identified in this SDG?
(Y) N N/A Were target compounds identified in the field duplicate pairs?

Compound	Concentration (ug/L)		RPD
	12	13	
XX	24	50 U	200
ZZZ	26	27	4

Compound	Concentration ( )		RPD

Compound	Concentration ( )		RPD

Compound	Concentration ( )		RPD

LDC #: 13575C2
SDG #: K0502505

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: 9
2nd Reviewer: 9

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = $(A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard
S = Standard deviation of the RRFs, X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (1/2 std)	Recalculated RRF (1/2 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL (06)	5/5/05	Phenol (1st internal standard)	1.60	1.60	1.60	1.60	5.0	5.0
			Naphthalene (2nd internal standard)	1.03	1.03	1.03	1.03	4.3	4.3
			Fluorene (3rd internal standard)	1.27	1.27	1.28	1.28	5.4	5.4
			~~Pentachlorophenol~~ (4th internal standard)	1.26	1.26	1.26	1.26	5.9	6.1
			Bis(2-ethylhexyl)phthalate (5th internal standard)	1.41	1.41	1.44	1.44	2.1	2.1
			Benzo(a)pyrene (6th internal standard)	1.30	1.30	1.32	1.32	8.8	8.8
2	ICAL	5/5/05	Phenol (1st internal standard)	2.60	2.60	2.53	2.53	7.5	7.5
			Naphthalene (2nd internal standard)	1.09	1.09	1.07	1.07	3.0	2.9
			Fluorene (3rd internal standard)	1.18	1.18	1.21	1.21	2.0	2.0
			~~Pentachlorophenol~~ (4th internal standard)	1.20	1.20	1.18	1.18	3.6	3.5
			Bis(2-ethylhexy)phthalate (5th internal standard)	1.31	1.31	1.34	1.34	3.6	3.6
			Benzo(a)pyrene (6th internal standard)	1.33	1.33	1.30	1.30	2.8	2.8
3			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 13575C2
SDG #: K90255

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: 9
2nd Reviewer: 9

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = $(A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (Initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	0503F001	5/3/05	Phenol (1st internal standard)	1.60	1.68	1.68	5	5
			Naphthalene (2nd internal standard)	1.03	1.08	1.08	5	5
			Fluorene (3rd internal standard)	1.28	1.40	1.40	9	9
			~~Pentachlorophenol~~ (4th internal standard)	1.26	1.31	1.31	4	4
			Bis(2-ethylhexyl)phthalate (5th internal standard)	1.44	1.44	1.44	0	0
			Benzo(a)pyrene (6th internal standard)	1.32	1.38	1.38	4	4
2	0505F001	5/5/05	Phenol (1st internal standard)	1.60	1.88	1.88	18	18
			Naphthalene (2nd internal standard)	1.03	1.09	1.09	5	5
			Fluorene (3rd internal standard)	1.28	1.38	1.38	8	8
			~~Pentachlorophenol~~ (4th internal standard)	1.26	1.29	1.29	2	2
			Bis(2-ethylhexyl)phthalate (5th internal standard)	1.44	1.47	1.47	3	2
			Benzo(a)pyrene (6th internal standard)	1.32	1.38	1.38	4	5
3	0508F001 (10)	5/8/05	Phenol (1st internal standard)	2.53	2.55	2.55	1	1
			Naphthalene (2nd internal standard)	1.07	1.10	1.10	3	3
			Fluorene (3rd internal standard)	1.21	1.17	1.17	3	3
			~~Pentachlorophenol~~ (4th internal standard)	1.18	1.14	1.14	3	3
			Bis(2-ethylhexyl)phthalate (5th internal standard)	1.34	1.27	1.27	5	5
			Benzo(a)pyrene (6th internal standard)	1.30	1.30	1.30	0	0

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 13575C2
SDG #: k50250S

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: 9
2nd reviewer: 9

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: 2

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	2500	1145	46	46	0
2-Fluorobiphenyl	↓	1183	47	47	↓
Terphenyl-d14	↓	1634	65	65	↓
Phenol-d5	3750	2043	54	54	↓
2-Fluorophenol	↓	1778	47	47	↓
2,4,6-Tribromophenol	↓	2141	57	57	↓
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 13575C2
SDG #: 620250S

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: 9
2nd Reviewer: 8

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentation

RPD = | MS - MSD | * 2/(MS + MSD) MS = Matrix spike percent recovery MSD = Matrix spike duplicate percent recovery

MS/MSD samples: 19/20

Compound	Spike Added (MS/S)		Sample Concentration (MB)	Spiked Sample Concentration (MS)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	------	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
Phenol	249	249	ND	150	164	60	60	66	66	9	9
2-Chlorophenol	↓	↓	↓	133	152	54	54	61	61	13	13
~~1,4-Dichlorobenzene~~											
N-Nitroso-di-n-propylamine	249	249	ND	140	172	56	56	69	69	21	21
~~1,2,4-Trichlorobenzene~~											
4-Chloro-3-methylphenol	249	249	ND	162	147	65	65	59	59	10	10
Acenaphthene	↓	↓	↓	164	156	66	66	63	63	5	5
4-Nitrophenol	↓	↓	↓	218	189	88	~~88~~	76	76	14	14
2,4-Dinitrotoluene	↓	↓	↓	171	164	69	69	66	66	4	4
Pentachlorophenol	↓	↓	↓	180	167	73	72	67	67	8	8
Pyrene	↓	↓	9.4	184	172	70	70	65	65	7	7

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 13575C2
SDG #: 1050505

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: 9
2nd Reviewer: 8

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration; SA = Spike added

RPD = I LCS - LCSD I * 2/(LCS + LCSD) LCS = Laboratory control sample percent recovery LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: ~~KW1050585-3/-4~~

Compound	Spike Added (MS)		Spike Concentration (MS)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
Phenol	250	~~270~~	168	185	67	67	69	69	10	10
2-Chlorophenol	↓	↓	164	185	66	66	69	69	12	12
~~1,4-Dichlorobenzene~~										
N-Nitroso-di-n-propylamine	250	~~270~~	167	179	67	67	66	66	7	7
1,~~2,4-Trichlorobenzene~~										
4-Chloro-3-methylphenol	250	~~270~~	181	188	72	72	70	70	4	4
Acenaphthene			175	179	70	70	66	66	2	2
4-Nitrophenol			214	230	85	85	85	85	7	7
2,4-Dinitrotoluene			199	205	80	80	76	76	3	3
Pentachlorophenol			190	198	76	76	73	73	4	4
Pyrene			193	209	77	77	77	77	8	8

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 18575C2
SDG #: 580250S

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: 9
2nd reviewer: 4

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

$$\text{Concentration} = \frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

V_o = Volume or weight of sample extract in milliliters (ml) or grams (g).

V_i = Volume of extract injected in microliters (ul)

V_t = Volume of the concentrated extract in microliters (ul)

Df = Dilution Factor.

%S = Percent solids, applicable to soil and solid matrices only.

2.0 = Factor of 2 to account for GPC cleanup

Example:

Sample I.D. 2 , A :

Conc. = $\frac{(10016)(1000)(2)(1)(\quad)}{(92646)(\cancel{1.60}\ 2.53)(33.94)(1)(0.59)}$

= 4.27 µg/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification